The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1733.—Vol. XXXVIII. LONDON, SATURDAY, NOVEMBER 7, 1868. (WITH SUPPLEMENT) {STAMPED .. SIXPENCE, UNSTAMPED FIVEPENCE

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 1842.)

HOLDERS of mining shares difficult of sale in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

PROSPER UNITED.—A circular has been issued by the purser detailing the various phases of the mines, which now shows that they are producing 137 tons of ore—copper and tin—from which it is assumed that "with a little improvement in copper ore the mines would pay their cost." This is highly important. The advance in Tin, which rose again £3 on Monday last, has also to be added to the prospects of the mines, and, therefore, buyers of Prosper United will not be wrong.

MR. JOHN BUMPUS, 44, THREADNEEDLE STREET,
has FOR SALE the following shares, free of commission :—

50 Anglo-Brazilian.	100 Frontino, 15s.	100 Princess of Wales, 4s 6
50 Australian United (Gold), 17s.	50 Gen. Brazilian, 7s 6d	40 Redmoor, 6s.
50 Caldbeck Fells, 12s.	15 Great Laxey, £21.	30 Royalton, 8s.
20 Chiverton, £4 6s. 3d.	20 Gt. No. Laxey, 12s.	50 So. Darren, 33s. 6d.
50 Chontales, £2½.	25 Gt. No. Downs, £2 7 6	25 So. Condurrow, 17s.
50 Drake Walls, 16s. 9d.	5 Great Vor, £13 12s 6d	35 W. Pr. of Wales, 9s 6d
20 East Caradon, £5¼.	5 Herodsfoot, £46½.	50 Wt. Drake Walls, 9s
35 East Grenville, £1 8 9	20 Marke Valley, £9½.	50 Wheal Crebor, 10s.
50 E. Rosewarne, 3s 9d	50 No. Treskerby, 10s 6d	20 Wheal Uny, £3 16s 3d
25 E. Carn Brea, 13s.	5 Nangiles, £7¼.	2 West Tolgus, £48.
20 E. Wh. Russell, 6s 6d	20 New Lovell, 18s.	5 Wt. Chiverton, £62½.
20 East Chiverton, 25s.	75 Pestarena, 27s. 9d.	50 W. Wheal Kitty, 7s.
20 Frank Mills, £3 17s.	2 Providence, £46.	50 Wt. Great Work, 23s.
	50 Prince of Wales, 42s 6	

MR. WILLIAM WARD,
STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MESSRS. WILSON, WARD, AND CO.,
STOCK AND SHAREDEALERS,
16, UNION COURT, OLD BROAD STREET, LONDON, E.C.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER,
224 & 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

JOHN RISLEY, (SWORN) STOCK AND
SHAREBROKER, 48, THREADNEEDLE STREET, LONDON, E.C.
Business transacted in the British Funds, Railway and other Stocks, Foreign Bonds, &c., on the usual commission, 1¼ per cent. on mining and other shares, above £2; and at £2 and under 6d. per share.

J. R. still advises the purchase of East Wheal Grenville shares. From the greatly improved prospects of the mine (as will be seen from the report of this week) there is not a doubt of the mine turning out a great prize, and shares will go to a very high figure.

J. R. also recommends North Retallack, Great Retallack, and Wheal Crebor shares as safe for a great rise.

Bankers: London and Westminster, Lothbury.

MR. JAMES HUME, STOCK AND SHAREDEALER,
74, OLD BROAD STREET, LONDON, and MINING EXCHANGE.
Mr. HUME will give the full market prices for the following shares, viz.—Don Pedro, Chontales, Chiverton, East Grenville, Grenville, Crebor, Prince of Wales, Great Vor, East Caradon, South Condurrow, Wheal Uny, Drake Walls, &c. Cash on receipt of transfer.

Money advanced on Shares or Stocks, for long or short periods.
Business done at a margin of 1¼ per cent.
Bankers: The London Joint-Stock Bank.

BARTLETT AND CHAPMAN, STOCK AND
SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C., are in a position to impart special information to intending purchasers in Wheal Chiverton, Great South Chiverton, East Chiverton, Lovell Consols, Tamar Valley, Trumpet Consols, and Royalton Mines.

GREAT SOUTH CHIVERTON.—The lode in the 50 contains spots of lead and copper, and will, no doubt, be valuable.

LOVELL CONSOLS.—The 12 end west will produce tin, and directly the end is in under the rich lode, worth 30l. per fathom, shares must advance.

Mines forced up far beyond their actual value by market operations should be avoided, as they generally result in loss.

Our "Investment Circular" forwarded on application.
Bankers: London and Westminster.

Established Fourteen Years.

MESSRS. WARD AND JACKMAN,
STOCK AND SHAREDEALERS,
No. 1, CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Members of the Exchange.

Closing prices, Friday Evening, Nov. 6.

Anglo-Brazilian	10s	to 12s.	Prince of Wales	40s	„ 42s 6d
Carn Camborne	£ ⅜	„ £ ¾	Port Phillip	£ 1¾	„ £ 2
Carn Brea	19	„ 21	Redmoor	4s	„ 6s
Chontales	2⅜	„ 2⅝	South Condurrow	14s	„ 16s
Chiverton	4	„ 4¼	St. John del Rey	17½	„ 18½
Chiverton Moor	6¼	„ 6½	Stray Park	4	„ 5
Cook's Kitchen	12	„ 13	Tincroft	16½	„ 17
Don Pedro ....(prem.)	3⅛	„ 3¼	West Chiverton	61	„ 63
Drake Walls	16s	„ 18s	West Caradon	2	„ 2½
East Basset	7⅛	„ 8⅛	West Drake Walls	7s	„ 9s
East Caradon	4⅜	„ 5½	West Wh. Frances	35	„ 37
East Grenville	4¼	„ 4½	West Wheal Seton	195	„ 205
East Lovell	8	„ 9	Wheal Crebor	8s	„ 10s
Frank Mills	3¼	„ 3¾	Wheal Em. Henrietta	26	„ 28
Frontino and Bolivia	14s 6d	„ 16s 6d	Wheal Grenville	1⅜	„ 1¾
Great Laxey	20	„ 21	Wh. Kitty (St. Agnes)	3½	„ 4
Great Wheal Vor	13¼	„ 13¾	Wheal Mary Ann	19	„ 20
Herodsfoot	46	„ 48	Wheal Seton	50	„ 52½
Marke Valley	8¾	„ 9¼	Wheal Uny	3½	„ 4
North Treskerby	8s	„ 10s	Yudanamutana	2⅞	„ 2⅞

Bankers: London and Westminster, Lothbury.

MR. C. A. POWELL, SHAREDEALER, 78, OLD BROAD
STREET, LONDON, E.C.
Transacts BUSINESS as BUYER or SELLER in the various shares currently dealt in at net prices.

Parties dealt with at a fair margin on the market price.

SPECIAL BUSINESS in Caldbeck Fells, Chiverton, Frontino, Prince of Wales, and North Treskerby.

Bankers: City Bank, Finch-lane.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C. (Established 14 years), has FOR SALE the FOLLOWING SHARES, at net prices :—

50 Anglo-Brazil., 10s 9d.	1 Foxdale.	10 West Caradon, £23⅝.
30 Carn Camborne, 14s 3	10 Frank Mills, £3⅛.	1 W. Frances, £36⅛.
1 Cargoll, £21.	40 Frontino, 15s. 6d.	1 West Seton, £207½.
20 Chontales, £2 11s.	3 Great Wh. Vor, £13½	20 Wheal Crebor, 9s. 6d.
20 Chiverton, £4 3s. 9d.	2 Herodsfoot, £47½.	30 Wh. Grenville, 33s. 6d
10 Chiver. Moor, £6 8 9	5 Marke Valley, £9 2s 6	5 Wh. Margaret, £5⅝.
5 Cook's Kitch., £12¼.	20 No. Treskerby, 9s. 9d.	1 Wheal Seton, £51¾.
30 Don Pedro, £3 3s. 9d.	20 Prince of Wales, 41s 3	25 West Godolphin, 22s.
20 Drake Walls, 17s.	25 Port Phillip, 37s 9d.	10 Wheal Uny, £3 16s 3d
40 East Reeth, 22s.	30 Redmoor, 4s. 9d.	50 West St. Ives.
3 East Basset, £8¼.	50 So. Condurrow, 15s.	3 Wh. Mary Ann. £19¾
10 East Caradon, £5⅛.	5 St John del Rey. £18⅛	5 W. Kitty (St. Agnes), £3 16s. 3d.
20 East Grenville, £4 8s 9	10 Stray Park, £4½.	20 Yudanamutana, £2¼
5 East Lovell, £8¾.	5 Tincroft, £16¾.	
	1 Wt. Chiverton, £61¼.	

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 20 years), is a SELLER of the following shares at net prices :—10 West Caradon, £23⅛; 25 Rose and Chiverton United, £5¾; 60 Caldbeck Fells, 13s. 6d.; 100 Lovell Consols; 70 Redmoor, 2s. 6d.; 55 Great South Chiverton; 30 North Treskerby, 8s. 6d.; 1 West Seton, £2 2½; 35 Wheal Grenville, 33s.; 10 Brynpostig, 56s.; 50 West Drake Walls, 8s. 6d.; 100 West St. Ives; 25 East Seton, 19s.; 5 Marke Valley, £8¾; 1 South Caradon; 95 Tamar Valley; 2 West Chiverton, £61¾; 10 Wheal Uny, £3⅛; 15 Wheal Kitty (St. Agnes), £4; 100 West Tremayne, 7s.; 50 Crebor, 8s.; 3 North Roskear, £12; 10 North Levant; 50 Wheal Ida, 4s. 6d.; 2 Devon Great Consols; 3 Cargoll.

SPECIAL BUSINESS in Taquaril Gold, Port Phillip, Anglo-Brazilian, Rose and Chiverton, Royalton, South Caradon, Great South Chiverton, Great Wheal Vor, Lovell Consols, and East Chiverton.

MR. PETER WATSON has BEEN in CORNWALL for the past TWO WEEKS VISITING and OBTAINING INFORMATION respecting the leading DIVIDEND and PROGRESSIVE MINES. He will return to town early next week, and be PREPARED to ADVISE as to the PURCHASE or SALE of shares in the following mines :—

Chiverton.	Marke Valley.	West Chiverton.
Chiverton Moor.	New Wheal Lovell.	West Drake Walls.
Devon Great Consols.	North Wh. Chiverton.	West Great Work.
Drake Walls.	North Wheal Crofty.	West Wheal Seton.
East Caradon.	Prince of Wales.	Wheal Buller.
East Wheal Grenville.	Providence.	Wheal Grenville.
East Wheal Lovell.	South Caradon.	Wheal Mary Ann.
East Wheal Seton.	South Great Work.	Wheal Seton.
Great Wheal Vor.	South Wheal Frances.	Wheal Trelawny.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," of Friday, Nov. 13, 1868, No. 505, Vol. X., price 6d. each copy, forwarded on application, will contain IMPORTANT INFORMATION on CORNISH MINES, with Remarks on the Present State of Tin, Copper, and Lead Mines generally, with Advice as to Purchases and Sales, &c. It will also contain Information on the several Foreign Mines, and on the Metal Market.

CORNISH AND FOREIGN MINES.—
TO SHAREHOLDERS AND OTHERS.
PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Nov. 6, No. 505, Vol. X., price 6d. each copy, forwarded on application, contains information on the following mines :—

Chiverton.	West Caradon.	Don Pedro.
West Great Work.	North Wheal Crofty.	Anglo-Brazilian.
South Great Work.	Yudanamutana.	Rossa Grande.
Wheal Trelawny.	St. John del Rey.	

With particulars of the Recent Advance on the Tin Standard and Present Quotation of Tin and Tin Ores.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to *bona fide* investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON
(three doors only from Hercules-passage, entrance to the Stock Exchange).
Twenty-four years' experience.
(Two in Cornwall and Twenty-two in London.)
Bankers: The Alliance Bank, and the Union Bank of London.
References given and required (when necessary) in all the principal towns of the United Kingdom.

MR. EDWARD COOKE,
FOREIGN AND BRITISH STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
Deals in all kinds of Foreign Stocks, and the shares of the various Gold Mines, also in the best Dividend and Progressive Mines.
Having visited the Mining Districts of Cornwall, including the Chiverton Mines, is prepared to offer an opinion thereon.
See weekly article on page 789.
A Price List sent free on application.
Bankers: Alliance Bank.

MR. W. H. CUELL,
No. 42, CORNHILL, LONDON, E.C.

MR G. D. SANDY, STOCK AND SHAREDEALER,
No. 48, THREADNEEDLE STREET, LONDON, E.C.
TAMAR VALLEY.—My advice is, buy these shares. Full particulars on application.

WALTER TREGELLAS, 122, BISHOPSGATE STREET
WITHIN, LONDON, E.C., DEALS in all STOCKS AND SHARES, either for cash or the fortnightly settlement.
SPECIAL BUSINESS in the following Gold Mines :—

Don Pedro.	General Brazilian.	Frontino and Bolivia.
Taquarli.	Rossa Grande.	Chontales.
Port Phillip.	Anglo-Brazilian.	

Bankers: The Alliance Bank.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., has SPECIAL BUSINESS as a BUYER or SELLER of shares in West Godolphin, Summer Hill, North Pool, and New Lovell.
E. J. B. deals in every description of Mining, Insurance, and other Stocks and Shares, and invites transactions from holders of stock difficult of sale in the open market.

MR. JOHN MOSS, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
Has BUSINESS as BUYER or SELLER in all British and Foreign Mines.
SPECIAL BUSINESS in Caldbeck Fells, Chiverton, Chontales, Frontino, and Prince of Wales.
Bankers: City Bank, Finch-lane, E.C.

MATTHEW GREENE, STOCK AND SHAREDEALER,
1, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
Must advance in price—
TAMAR VALLEY SILVER-LEAD and NEW CLIFFORD COPPER MINES.
Full particulars on application.

INTENDING INVESTORS.—The "FINANCIAL GAZETTE," published by Mr. Y. CHRISTIAN, should be consulted with a VIEW to the SAFE EMPLOYMENT of CAPITAL. It contains Original Articles, a Review of the Money Markets, and a selection of investments paying 10 to 17 per cent., and such information as is necessary to guide intending investors.
6, Bond-court, Mansion House, London, E.C.
Bankers: Bank of England.

INVESTORS IN MINING COMPANIES.—
Mr. CHRISTIAN recommends the immediate PURCHASE of NORTH LEVANT SHARES, whether bought to hold as an investment or to sell again. It is a splendid property, and dividends are close at hand. Although Mr. CHRISTIAN is the only person publicly recommending the purchase of shares in this sett, he does so with the greatest of confidence, feeling assured that those who buy now will do well.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C.
T. R. has BUSINESS in the following mines, at close market prices :—

Caldbeck Fells.	East Caradon.	Tincroft.
Chiverton.	East Basset.	West Chiverton.
Chontales.	Frontino and Bolivia.	West Seton.
Carn Brea.	Great Wheal Vor.	Wheal Agar.
Cook's Kitchen.	Marke Valley.	Wheal Crebor.
Devon Consols.	North Downs.	Wheal Grenville.
East Grenville.	North Roskear.	Wheal Seton.
	South Caradon.	Wheal Uny.

T. R. is in a position to give advice respecting Prince of Wales, Chiverton, and Chiverton Moor Mines, having had these three properties inspected again this week. Parties desirous of dealing in these shares should consult T. R. at once, as money can be made by acting in the right way. I have hitherto been right in my opinion of these mines, having inspected them myself with other competent agents.

Money advanced to any extent on good mining shares.
Office hours Ten to Four. Bankers: Bank of England.

INVESTMENT, LOAN, AND BANK AGENCY.
Established 1839.
Attention is invited to the system adopted by this Agency, which offers peculiar advantages to Investors.
English and Foreign Public Securities of every description Bought and Sold, in any quantities, at the current quotations of the day, free of Commission.
LOANS granted, for one year or any shorter period, on Stocks and Shares having a market value.
FIVE PER CENT. INTEREST allowed upon DEPOSITS of all amounts withdrawable at one month's notice.
Bank and Finance Agency Business generally undertaken.
TAYLOR AND COMPANY.
No. 12, Clement's-lane, Lombard-street, London, E.C.

MR. CHARLES THOMAS,
MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C.

Third Edition, price One Shilling; post-free, fourteen stamps,
MINING FIELDS OF THE WEST:
A PRACTICAL EXPOSITION OF THE
PRINCIPAL MINES and MINING DISTRICTS of CORNWALL and DEVON.
Published by CHARLES THOMAS,
At No. 3, Great St. Helen's, London, E.C.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE,
LONDON, E.C. (Members of the Exchange), STOCK AND SHAREDEALERS, transact business in all kinds of securities at closest net prices for cash or account.
MARKE VALLEY, EAST CARADON, WEST ROSE DOWN, and CARN CAMBORNE MINES.—Although difficult to effect transactions in these mines at times on the Mining Market the advertisers are always in a position amongst their correspondents to buy and sell at close prices, and they do not hesitate to recommend a purchase in each and all of the above for a great advance in price and large dividends.
GREAT LAXEY and SOUTH DARREN. SPECIAL BUSINESS in these mines.
Bankers: London and County Bank.

Established Twelve Years.

MR. FREDERICK WM. MANSELL, 44, THREADNEEDLE-
STREET, LONDON, is in a position to deal in all shares quoted on the last page of this day's Journal, and has FOR SALE the following, free of commission :—

5 Herodsfoot, £45¾.	75 Prince of Wales, 42s 6d	50 Pestarena.
50 North Treskerby, 9s.	20 Hudson Bay, £14¾.	3 Wt. Chiverton, £61½.
150 Redmoor, 3s.	5 Royal Mail (Steam), £53¼.	40 So. Herodsfoot, 22s 6d
30 Drake Walls, 17s. 6d.		50 East Grenville, £4⅝.
5 Great Laxey, £20½.	100 Gen. Brazilian, £¼ premium.	10 City of Moscow (Gas), £6¼.
50 Grenville, 33s.	1 Devon Great Consols.	15 St John del Rey. £18¼
20 Chiverton, £4¾.		

BUYER of 10 East Caradon; 200 Tamar Valley; and 70 Great So. Chiverton.
Nov. 6, 1868. Bankers: London Joint Stock Bank.

TAMAR VALLEY AND GREAT SOUTH CHIVERTON
SILVER-LEAD MINES.
MR. FREDERICK WILLIAM MANSELL advises the immediate PURCHASE of SHARES in each of the above. Specimens of the lead, with plans and sections of the operations, and every information upon application.
44, Threadneedle-street, London.

MR. WILLIAM SEWARD, STOCK AND MINING SHARE
BROKER, 19, THROGMORTON STREET, LONDON, E.C.
Every description of shares BOUGHT and SOLD at the best market prices.

MR. EMANUEL BEAZLEY,
STOCK AND SHAREDEALER,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. J. H. COCK, STOCK AND MINING SHAREDEALER,
74, OLD BROAD STREET, LONDON, E.C.
Fifteen years' experience in Cornwall and London.
SPECIAL BUSINESS in Providence, Margaret, South Condurrow, Drake Walls, East Grenville, and Chontales.

CHONTALES GOLD COMPANY.—FULL PARTICULARS of the DIFFERENT CLASSES of SHARES can be obtained on application to Mr. J. H. MURCHISON, No. 8, Austinfriars, E.C.

MR. HENRY MANSELL,
44, THREADNEEDLE STREET, LONDON, has FOR SALE at net prices :—

20 Chontales, £2½.	10 Frank Mills, £3 7s 6d	5 West Caradon, £2½.
30 Chiv. Moor, £6 11s 3d	5 Great Laxey, £21.	20 Wh. Chiverton, £4 8 9
25 Drake Walls, 17s.	10 Gt. Retallack, £2⅞.	35 Wheal Crebor, 9s.
30 E. Grenville, £4 7s 6d	5 Great Wh. Vor, £13½	2 Emily Henrietta, £28
15 East Caradon, £4 18 9	150 Prince of Wales, 41s 6	3 Wh. Seton, £52½.

TAMAR VALLEY SILVER-LEAD MINE.—The cross-cut from the 57 fm. level will be commenced in a few days to cut the rich lode seen in Tamar Valley shaft. Shares should be purchased at once to secure large profits.
GREAT SOUTH CHIVERTON MINE.—The 50 end west continues to improve, and a course of silver-lead is expected in 2 or 3 fms. driving.
H. M. has BUSINESS, both as BUYER and SELLER, in these shares.
Thirteen Years' Experience
Bankers: London Joint-Stock Bank.
References exchanged.

MR. THOMAS THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.
ROYALTON.—The steady increase in the price of tin is causing a great demand for shares in legitimate tin mines, and which, there can be little doubt, will become generally valuable. Investors, however, should be careful how they place money in deep and expensive mines, which can only pay profits with tin at high prices. They should rather seek an investment in those mines which, with extensive reserves, can pay profits with tin at its lowest price. Among the best of this latter class I place Royalton, and recommend the purchase of the shares wherever they may be met with. At their present price they are intrinsically very cheap indeed.

JAMES SCOTT AND CO., STOCK AND SHAREDEALERS,
14, PINNER'S HALL, OLD BROAD STREET, LONDON, E.C.
Money advanced on marketable mine shares at 5 per cent. per annum.
J. S. and Co. having in their employ several of the most experienced and trustworthy mine agents in the United Kingdom, who periodically inspect on their behalf all the *bona fide* mines in Devon, Cornwall, and Wales, are enable to accord to their friends and clients reliable advice as to the present and future prospects of mines they deem worthy the attention of investors.
References will be given to the Alliance Bank and the Bank of England.
J. S. and Co. can recommend several good low-priced shares likely to rise considerably in value within a few months.

TO CAPITALISTS AND INVESTORS.

MESSRS. T. A. MUNDY AND CO. have FOR SALE a QUANTITY of MISCELLANEOUS SHARES, many of them very great bargains, and unattainable through any other channel. Dividends may be safely secured varying from 8 to 20 per cent.
Special attention given to *bona fide* English and Foreign Mining Shares.
MISCELLANEOUS SHARE EXCHANGE,
38, BISHOPSGATE STREET, WITHIN, LONDON, E.C.

MR. J. B. REYNOLDS, STOCK AND SHAREDEALER,
70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.,
Mines inspected by competent authorities on reasonable terms.
Established Eleven Years.
Bankers: City Bank.
References exchanged in any part of the United Kingdom. Parties of well-known respectability can have stock prior to payment if desired.

MR. EDWARD BREWIS, STOCK AND SHAREDEALER,
PALMERSTON BUILDINGS, OLD BROAD STREET, LONDON, E.C.
20 Chiverton, £3⅞; 10 East Caradon; 20 West Caradon, £2½; 10 Mineral Bottom; 100 West Drake Walls; 50 North Treskerby; 100 South Condurrow; 60 Wheal Agar; 25 Caldbeck Fells; 170 East Bottle Hill; 10 North Levant; 50 North Crofty; 80 Okel Tor; 20 Prince of Wales; 25 Don Pedro; 10 Wheal Uny; 5 Great Vor; 20 East Chiverton; 30 Chontales; 20 Frank Mills; 5 Cargoll; and 50 Anglo-Brazilian.
CORNWALL HEMATITE IRON ORE COMPANY.—The advantageous contract already entered into will place this company in an enviable position; apply for price of shares.
ROYALTON.—SPECIAL BUSINESS in these shares, the coming dividend mine of 1869.
LUCY PHILLIPS, WEST KITTY, WEST GODOLPHIN, GLAN ALUN, GREAT RHOSESMOR.—BUYERS or SELLERS will find a ready market through Mr. BREWIS, who has always business on.
Operations now being carried on in Chiverton Valley may cause shares to advance quite as much as West Chiverton did in 1863. Clients should act at once while there is a chance; every information.

MR. J. N. MAUGHAN, STOCK AND SHAREBROKER
(Member of the Stock Exchange),
No. 2, COLLINGWOOD STREET, NEWCASTLE-ON-TYNE,
Bankers: Messrs. Lambton and Co.

CWM DWYFOR (NORTH WALES) COPPER AND SILVER-LEAD MINES COMPANY (LIMITED),

INCORPORATED UNDER THE COMPANIES ACTS, 1862 AND 1867,

Capital £12,500, in 12,500 shares of £1 each,

Fully paid-up on allotment.

DIRECTORS.

THOMAS HARVEY, Esq., Bryn-y-Mor, Merionethshire—MANAGING DIRECTOR.
M. D'ARCY, Esq. (Messrs. D'Arcy and Co.), 227, Gresham House, Old Broad-street.
J. HOPGOOD, Esq., 15, George-street, Hanover-square, W.
E. DE PASS, Esq., 50, Gloucester-terrace, Hyde Park.
R. M. LAWRANCE, Esq., M.D., 60, Great Cumberland-place, Hyde Park.

BANKERS.

METROPOLITAN BANK (LIMITED), LONDON.

SECRETARY—Mr. G. CHAMBERS.

OFFICES.

ST. CLEMENT'S HOUSE, ST. CLEMENT'S LANE, LONDON, E.C.

This company is being formed for the purpose of purchasing and working the valuable copper lodes and other mineral veins in the extensive property of the New Prince of Wales Slate Company, situate in the parish of Llanfihangel-y-Pennant, in the county of Carnarvon. This mineral property possesses advantages of an unusual character, being situated on the slope of a mountain, where the veins can be worked from 200 to 300 yards deep by levels alone. The ore, a yellow sulphuret of copper, is of great richness and purity. A sample assayed by Messrs. Claudet and Co. produced nearly 19 per cent. fine copper, being about five times the average produce of Cornish copper ores. There is also a fine vein of silver-lead, containing upwards of 60 per cent. of lead, besides silver, thus enhancing greatly the value of this unique property. The enduring character of these mineral veins is proved in the adjoining mine, the Drws-y-Coed, the oldest mine in Wales, said to have commenced working in the year 1600, and which is still yielding a large amount of copper from a great depth below the valley, having been gradually worked down from the top of the mountain. The Cwm Dwyfor is a purely virgin mine in whole ground, from which several hundred tons of fine copper ore have been raised by manual labour alone. The permanent character of this mine is, therefore, placed beyond all doubt.

The copper and lead lodes in Cwm Dwyfor were originally worked by common miners, who realised good profits from their working into the lodes at surface without tunnels, or the expenditure of any capital whatever. If properly worked by levels large returns both of copper and silver-lead can be obtained. The advantages of working mineral veins so rich in produce as these, without the drawback of expensive machinery, are very great, and can seldom be obtained in this country. There are at present several tons of copper ore on the mine which have been recently broken, and the workings have already recommenced on the lodes from which the ores have been raised.

The great cross-course of the country, which is believed to occasion all the deposits of copper and lead in the lodes intersected by it, traverses this property. The report of Mr. Thomas Colliver, a high authority on mining in Wales, appended hereto, confirms the foregoing statement.

The company obtain the lease of these mineral veins for 30 years, and the use of the water, and abundant land for all purposes for about a mile in extent, for the sum of £5000, and a royalty of one-fifteenth of the produce. The situation and magnitude of the lodes, and the high quality of the ore, together with the inexpensive character of the workings, by levels alone, assure beyond all doubt large and continuous profits. The shares being all paid up, no further liability of any kind can be incurred by the shareholders.

Applications for shares, prospectuses, and forms of application, may be addressed to the secretary, at the offices of the company, where also specimens of the ores can be seen.

REPORT.

Bangor Slate Quarries, Sept. 8.—This mine is situated in the parish of Llanfihangel-y-Pennant, in the county of Carnarvon, North Wales. The lodes are parallel with, and adjoining, the celebrated Drws-y-Coed Mine, the oldest copper mine in Wales now in work, and which is said to have been first worked more than two centuries ago. The bearing of the lodes is east and west, and abutting against the main cross-course of the country, which can be traced to the north of Snowdon, and southward to the sea, near Criccieth, a distance of about 12 miles. The lodes are imbedded in the congenial strata generally classed as the Cambrian, well known as being so productive for copper in the locality, and situated on the slope of the mountain, forming an angle of about 30°, averaging, where opened, over 2 yards in breadth, carrying two well-defined walls, and from their situation can be worked to the depth of 200 yards from levels alone. The length of the first level, of 200 yards, would give a depth of 100 yards. The second level, of 300 yards, would give 100 yards more: total, 200 yards. For many years these lodes were worked by common miners, for their own profit, who had to raise and dress the ore, and carry the produce on their backs for miles, out of which they realised good livings. The ore is yellow sulphuret of copper, of high percentage, averaging at least from 10 to 12 per cent. for fine copper. A moderate amount expended in the opening of this mine, which would be chiefly for labour, would, in my opinion, produce a good percentage for the capital invested, as the only machinery required would be for inclines, tramways, and a crusher for the ore. At present there is a railway to within about 3½ miles of the mine, and likely to be extended to within a mile, by which the ore can be conveyed to the shipping port. From my experience of copper mining in Wales, I have no hesitation in stating that I consider this a proper and safe investment for capitalists, if fairly opened, and worked with economy, as no sinking or pumping is required, there being an abundance of water on the grant for crushing and dressing the ore. THOMAS COLLIVER.

WEST ST. IVES CONSOLIDATED TIN MINING COMPANY (LIMITED).

Capital £10,000, in 10,000 shares of £1 each.

Deposit, 5s. per share on application, 5s. on allotment, 5s. in three months, and 5s. in six months after allotment.

Shares may be paid up in full, and 5 per cent. interest will be allowed on calls paid in advance. Share warrants for fully paid-up shares will be issued, payable to bearer, which will pass from hand to hand without transfer. According to the Companies Act, 1867, the names of the holders of such warrant shares need not be registered.

If no allotment be made, the deposit money will be returned in full.

DIRECTORS.

WM. ALDRED, Esq. (Messrs. Aldred and Maynes, Machinists), Manchester.
JACOB HARRISON, Esq., 2, De Grey Terrace, Leeds (Chairman of the Yorkshire Lead Mining Company).
BENJAMIN MORTON, Esq., Manufacturer, Linthwaite, near Huddersfield.
JAMES ROBERTS, Esq., Surgeon, Golcar, near Huddersfield.
THOS. STYRING, Esq., Huddersfield.

BANKERS.

The ALLIANCE BANK (Limited), LONDON; and KING STREET, MANCHESTER; and its other Branches.

SOLICITORS.

MESSRS. MARSLAND AND ADDLESHAW, 67, King-street, Manchester.

AUDITOR.

MR. J. A. BURNE, Accountant, 57, Princess-street, Manchester.

MANAGING CAPTAIN—Capt. JOHN NANCARROW.

PURSER—J. M. KERNICK, Esq., J.P., St. Ives.

SECRETARY—MR. THOMAS ALDRED.

OFFICES,—28, PALL MALL, MANCHESTER.

PROSPECTUS.

This company has purchased a lease of a most valuable mineral property—which is already extensively developed—together with the whole of the buildings, pumping and winding-engines, and all other necessary machinery, plant, &c.; and also for the purpose of working the mines.

There mines are situate in the parish of Towednack, St. Ives, Cornwall—a district acknowledged by all mineralogists as being extremely rich in the production of tin ores. The sett is very extensive, being about a mile in length, and three quarters of a mile in width. The southern portion (this being the portion which it is intended to work at present) contains seven lodes, in a width of 70 fathoms on the surface, converging to a width of only 56 fathoms at a depth of 70 fathoms, and converges still nearer at a greater depth. This is a very important feature, as it is the settled opinion of all practical miners that the nearer the lodes approach each other in depth the greater are the deposits of mineral. A reference to the plan of the property (which can be seen at the offices of the company) will show the important bearings of these lodes, and the extent to which they have been worked.

These mines were formerly worked with an insufficient amount of capital, by a limited company, who expended a very large amount in the erection of buildings, machinery, plant, &c., also in underground workings. A portion of this outlay, to the extent of several thousand pounds, is now available for the immediate recovery of tin ore. The working of the mines was discontinued about three years ago, for want of further capital, they having injudiciously expended a large amount on the northern portion of the sett (which turned out to be unproductive), instead of developing the southern portion, containing the seven lodes above referred to, which had given unmistakeable evidence of its richness—the sales of tin obtained from it from August, 1860, to November, 1863, amounting to £10,934 9s. 7d. So high an opinion had many of the old shareholders of the value of the mines, that a considerable number of them have taken shares in this company, and have been mainly instrumental in the formation thereof.

This valuable mineral property is held under a lease for 21 years from June 24, 1859 (renewable), at a yearly surface rent of £100 and a royalty of 1-18th; but in consideration of the large outlay made by the former company, the lessors have very generously agreed to reduce the surface rent to £25 a year, and to forego the royalty for one year, or until such time as the mine is in a position to pay a dividend to the shareholders.

The adjoining mines (the St. Ives Consols, and the Rosewall Hill and Ransom, the former of which is a parallel mine, and has produced above 1,000,000 sterling during 40 years, and has paid in dividends upwards of £50 per share upon an outlay of only £8 per share) are producing large and regular returns. They have proved to be abundantly rich in tin ores, holding their riches to a great depth, the former being about 200 fathoms deep, and the latter about 160 fathoms. The West St. Ives Consolidated have yielded more tin than the above mines did at the same depth and extent of workings; and it is the opinion, not only of Capt. Nancarrow (who was one of the agents of the St. Ives Consols for many years), but also of other experienced miners in that district, who are well acquainted with the property, that the mines will become more productive as the workings are extended in depth; and they are thoroughly convinced that this property presents every feature of success, and that it may reasonably be considered as an undertaking promising large profits to the investors; and from the fact that a large return has already been made for tin obtained from these mines, it may be said that the present undertaking is almost, if not entirely, divested of that risk which it is generally considered attends mining enterprise.

It is the determination of the directors that in the future working of the mines every practical economy shall be exercised; and so confident are they of the beneficial results to be realised, that they will make no charge for attendances until the mine becomes profitable. The secretary's salary, including office rent in Manchester, is fixed at £50 per annum.

Application for shares must be made on the form accompanying the prospectus, and may be sent either to the bankers; any of the directors; the secretary of the company, at the offices, 28, Pall Mall; or to Messrs. Hannam and Co., 449 Strand, London, and Royal Insurance Buildings, Manchester. No application for shares can be entertained unless accompanied by a deposit of 5s. per share. If no allotment be made, the deposit money will be returned in full.

Parties who may prefer warrant shares fully paid up, made payable to bearer, will please state so when making application for shares.

Further information may be obtained, and samples of the ore and plan of the property may be seen, on application to the Secretary, also Capt. John Nancarrow's report.

THE GREAT METALLURGICAL PROBLEM OF THE DAY.

The Iron Trade of Great Britain has attained dimensions so vast, giving direct employment to nearly a quarter of a million of our population, that its prosperity or the reverse affords an index to the comfort or privation of an important section of the wage-receiving class, whilst it materially contributes to the internal traffic of the kingdom, and the employment of our commercial marine. Within the last 20 years the employment of wrought-iron in shipbuilding and general constructive purposes has multiplied a hundredfold the ramifications of this trade, as well as the demand for material, by increasing the purposes to which it is applied. This result is due to the energy and skill which have given greater efficiency to the productions of the furnace and the mine. In cast and wrought iron, and steel, our manufacturers find a market in every quarter of the globe. The improvements which have from time to time been made in the conversion of iron into steel are as honourable to the persevering study of the country as the results are of the highest economical importance to the nation.

It is not alone in machinery, tools, cutlery, and the finer instruments of science that economy of conversion of iron into steel is of the greatest moment to the producer as to the consumer individually, whilst it enables Great Britain to hold her place in foreign markets, that every real improvement is to be regarded as of the first economical importance; but the substitution of steel for iron in more substantial work than was formerly considered practicable, in reference to cost, has given greater force than ever to the economical aspect of the question. Steel is coming into use where it was never before employed; its superior durability gives it a decided preference as for steel rails, and its employment is limited only by its cost—that is, the cost of conversion. "The most striking feature of the industry of the present day," writes Mr. ABRAM HEWITT, United States Commissioner, in his report on the Paris Exposition of 1867, "is the marked advance in the manufacture of steel." With the characteristic intelligence of his countrymen, Mr. HEWITT recognised the fact at once. But he adds—"Another fact could not fail to be noticed from a careful study of the products and processes represented in the Exposition—that good steel can only be made from good material, no matter what process is employed (p. 23)." The whole question of cost is involved in this proposition. Mr. HEWITT goes further, and says—

"Another conclusion is that the Bessemer process will not, as Mr. BESSEMER originally supposed, supersede the puddling process, which appears to be, as yet, the only method applicable to the conversion of by far the larger portion of pig-iron made into wrought-iron, because by far the larger portion of pig-iron made is of a quality not good enough for the Bessemer process, which absolutely exacts the absence of sulphur and phosphorus."

In the *Mining Journal* of May 9 we drew attention to the very interesting question at issue which excited the iron-making world, and we called attention to what took place soon after the reading by Mr. BESSEMER of his famous Cheltenham paper—circumstances which it is well to recall:—

"Amongst the gentlemen who were present in London by invitation of Mr. BESSEMER, and who witnessed the comparative failure at that time of the process, even with Blaenavon iron, was a maker of pigs in South Staffordshire, who was curious to know what would be the result of the use of iron of the class smelted by the majority of ironmasters present if no more satisfactory issue than the making of scull-iron followed upon the treating of the best cold-blast pigs. He should in particular like to learn what would be the result upon iron of the most inferior character. With a view to the solving of the query, he had some pigs sent to Mr. BESSEMER which had been made with as large a proportion of tap-cinder in them as could at that time be used. The result of Mr. BESSEMER'S process upon this iron was not to produce steel or even scull-iron, but simply to produce a magnificent display of sparks, in which the whole bulk disappeared. Mr. BESSEMER and Mr. LONGSDEN, however, continued at work, and in two or three years, assisted by the use of spiegeleisen, and the lapsing of Mr. MUSHET'S manganese patents, the process came again before the public. It was received with coldness, and by becoming a manufacturer of steel himself Mr. BESSEMER had to demonstrate the worth of his invention. Enabled now to introduce the requisite amount of carbon into his blown iron, Mr. BESSEMER succeeded in making useful steel, not from Blaenavon and other cold-blast irons alone, but also from the hot-blast hematites now made in abundance in the North Lancashire and the West Cumberland districts. But even with spiegeleisen, or a pure alloy of iron and manganese, Mr. BESSEMER, as is well known, has not yet succeeded in producing a workable steel from any iron inferior in quality to the hot-blast hematites just mentioned."

Neither at that time nor since has Mr. BESSEMER been able to produce good steel from inferior ores, charged with impurities. But it has long been acknowledged as an object most desirable of attainment that the large mass of our poorer ores, which are found in great abundance, should be utilised in the making of steel. It was in the course of a discussion upon a paper read by Mr. BESSEMER at Birmingham (British Association), that Mr. BESSEMER remarked—"there was still a large gap, a fine field for discovery for many a clever man, for years to come." We do not assume to pry into the secrets of the future, and for the present we are rejoiced to find that the process patented by Mr. HEATON, of the Langley Mill Iron Works, in the Erewash Valley, to which we esteem it a great privilege to have been the first amongst the metropolitan press to invite attention, has since been the subject of most careful tests and investigations, by the highest and most competent authorities, and is declared to be, "both with respect to economy of production and utilisation of inferior pig-iron, one of those metallurgic advances which leave their mark indelibly on great national industries."

Our readers will be interested in a brief recapitulation of the leading features of this process, one as remarkable for simplicity as for efficiency, and we shall endeavour to lay before them such portions of the results of the investigation of scientific authorities as our space will permit. So wonderful a metallurgical advance in the manufacture of Steel is without a precedent. Mr. HEATON'S patents, for converting cast-iron into wrought-iron," and "for converting cast-iron into steel," are dated 1866, 1867, and 1868. It is important to note the distinction, as we shall presently show. The triumphs which Mr. HEATON has achieved apply to both wrought-iron and steel; and, speaking for ourselves, we see no reason why the process should not be equally successful in the preliminary smelting of inferior ores into pig. It seems both desirable and feasible that we should begin at the beginning. The first report under our notice is that of Mr. ROBERT MALLET, F.R.S., M.A., and Member of the Institute of Civil Engineers, and is dated Sept. 12 of the present year. Mr. MALLET, in company with Dr. MILLER, of King's College, Vice-President of the Royal Society, and Assayer to the Mint, made a personal investigation of the system in operation on a manufacturing scale at the Langley Mill Works, and his report, which is of too great length to give *in extenso*, affirms "the following as truths established beyond all question:"—

1.—That HEATON'S patent process of conversion by means of nitrate of soda is at all points in perfect adcordance with metallurgic theory. That it can be conducted upon the great scale with perfect safety, uniformity, and facility, and that it yields products of very high commercial value.

2.—That in point of manufacturing economy or cost, it can compete with advantage against every other known process for the production of wrought-iron and steel from pig-iron.

3.—Amongst its strong points, however, apart from and over and above any mere economy in the cost of production are these—it enables first-class wrought-iron and excellent steel to be produced from coarse, low-priced brands of crude pig-irons, *rich in phosphorus and sulphur*, from which no other known process, not even BESSEMER'S, enables steel of commercial value to be produced at all, nor wrought-iron, except such as is more or less either "cold short" or "red short." Thus wrought iron and cast-steel of very high qualities have been produced in my presence from *Cleveland and Northamptonshire pig-irons, rich in phosphorus and sulphur;* and every ironmaster, I presume, knows that first-class wrought-iron has not previously been produced from pig-iron of either of those districts, nor marketable steel from them at all.

In a subsequent part of his report Mr. MALLET refers to the analysis of the products by Dr. MILLER, which proves incontrovertibly that the HEATON process does eliminate from the crude pig-iron almost the whole of the phosphorus and sulphur, the trace remaining being unobjectionable in the wrought-iron and steel produced, even where these have been made from pig-iron known to be the richest in these injurious constituents of any make in Great Britain.

The report of Dr. MILLER will convey to the skilled iron and steel maker strong and conclusive evidence of the value of this process:—

On that occasion (says Dr. MILLER) 6¼ cwts. of Clay-lane forge pig, No. 4, was charged into a hot cupola which contained no other iron, and immediately after 6¼ cwts. of Stanton forge pig, No. 4, was added, and the whole, when melted, was drawn off into a ladle, from which it was transferred to the converter. I have made an examination of the following samples:—No. 4, crude cupola pig; No. 7, hammered crude steel; No. 8, rolled steely iron; No. 5, slag from the converter. I shall first give the results of my analysis of the three samples of metal:

	Cupola pig (4).	Crude steel (7).	Steel-iron (8).
Carbon	2·830	1·800	0·993
Silicon, with a little titanium	2·950	0·266	0·149
Sulphur	0·113	0·018	traces
Phosphorus	1·455	0·298	0·292
Arsenic	0·041	0·039	0·024
Manganese	0·318	0·090	0·088
Calcium	—	0·319	0·310
Sodium	—	0·144	traces
Iron (by difference)	92·293	97·026	98·144
Total	100·050	100·000	100·000

It will be obvious from a comparison of these results that the reaction with the nitrate of soda has removed a large proportion of the carbon, silicon, and phosphorus, as well as most of the sulphur. The quantity of phosphorus (0·298 per cent.) retained by the sample of crude steel from the converter which I analised is obviously not such as to injure the quality. The bar-iron (steel-iron) was in our presence subjected to many severe tests. It was bent and hammered sharply round, without cracking. It was forged and subjected to a similar trial both at a cherry-red heat and at a clear yellow heat, without cracking; it also welded satisfactorily. The removal of the silicon is also a marked result of the action of the nitrate. It is obvious that the practical point to be attended to is to procure results which shall be uniform, so as to give steel of uniform quality when pig of similar composition is subjected to the process. The experiment of Mr. KIRKALDY on the tensile strength of various specimens afford strong evidence that such uniformity is attainable.

I have not thought it necessary to make a complete analysis of the slag, but have determined the quantity of sand, silica, phosphoric and sulphuric acid, as well as the amount of iron which it contains. It was less soluble in water than I had been led to expect, and it has not deliquesced, though left in a paper parcel. I found that of 100 parts of the finely powdered slag, 11·9 were soluble in water. The following was the result of my analysis:—Sand, 47·3; silica in combination, 6·1; phosphoric acid, 6·8; sulphuric acid, 1·1; iron (a good deal of it as metal), 12·6; soda and lime, 26·1: total, 100·0. This result shows that a large proportion of phosphorus is extracted by the exodising influence of the nitrate, and that a certain amount of the iron is mechanically diffused through the slag. The proportion of slag to the yield of crude steel-iron was not ascertained by direct experiment; but, calculating from the materials employed, its maximum amount could not have exceeded 23 per cent. of the weight of the charge of molten metal. Consequently, the 12·6 per cent. of iron in the slag would not be more than 3 per cent. of the iron operated on."

Mr. HEATON has, since Dr. MILLER'S visit, ascertained that the slag actually produced did not on an average of three experiments exceed one-third of the quantity here estimated as the possible maximum.

It remains for us to state that the products of the process were submitted to the practical test of Mr. DAVID KIRKALDY, at his testing works, the Grove, Southwark; and the elaborate experiments recorded in the tabular report of that distinguished investigator with respect to the ultimate resistance to rupture by tension, and to the final elongation at rupture, of samples of "steel-iron" and of "cast-steel" tested by this process, show great uniformity as to the strength and toughness of the material tested, and presents, when analysed, the following average results:—

	Rupturing strain, in tons per square inch.	Extension at rupture, in per cent. of original length.
HEATON'S patent steel iron	22·72 tons	21·05 per cent.
HEATON'S patent cast steel	41·73 „	7·20 „

As regards steel-irons, the averages compare most favourably with the very best, strongest, and toughest wrought-irons; and, as respects "cast-steel," show properties which rank them as the very best in the market produced by any process whatever. The "steel-iron" is confessed to come nearest in its properties to the Low Moor and Bowling. The cast-steel approximates closely in strength and toughness to that supplied to commerce by the largest and best known works which are now producing Bessemer steel.

We have given at considerable length, which, however, we feel the importance of the subject and our own previously expressed opinions fully justify, the most unequivocal evidences of the best authorities as to the efficiency of HEATON'S process, and the value of the products. It remains to notice a few incidental matters which enhance its commercial importance; and, in the first place, we draw attention to the fact that the first cost of plant for working the patent does not exceed 600*l.*—in fact, 550*l.*; that no costly steam-power is required, as in the Pneumatic process of Mr. BESSEMER, no destructive action upon the converter, as in the last-named process, and the puddling process is altogether rendered unnecessary.

The price of steel (general market price) is (say) 14*l.* a ton. By HEATON'S process it can be produced at several pounds sterling under that sum, for it deals with inferior and cheap ores, and the plant required is insignificant in point of outlay; the wear and tear is altogether unimportant, the waste of metal is below that of any other known process, and the process being chemical, and not mechanical, the labour and expense of puddling are dispensed with.

This extraordinary metallurgical advance marks a new era in the manufacture of steel; it will give a fresh activity to a great national industry, which has been so long depressed, as well by external circumstances as by internal disputes, and will enable us to hold our own in foreign markets, in spite of an adverse tariff not absolutely prohibitory.

The economy effected will more than balance the cost of freight to the remotest continents, and the export duties of foreign States.

THE CHIMERAS OF SCIENCE: *On Astrology, Alchemy, Squaring the Circle, Perpetuum Mobile, &c.*: by HENRY DIRCKS, C.E., LL.D., &c.—On Thursday the first, or inaugural, lecture for the present season was delivered in the grand dining saloon of the Crystal Palace, a capacious and handsome room, capable of accommodating about 800 persons. A large, fashionable, and attentive audience had assembled at 3 o'clock, to hear a discourse on astrology, alchemy, and kindred chimeras of science. The lecturer observed in his exordium that the subject of his lecture afforded a striking comment on the truthfulness of the aphorism—"A little learning is a dangerous thing." Of astrology he first noticed its early connection with astronomy, and the low state in which that science had existed for 17 centuries, for until the introduction of the telescope, and its first use by Galileo, at Venice, in 1609, philosophers were very indifferently acquainted with the planets. And at the same time the grossest superstitions in respect to magical cures, and matters of natural philosophy generally, obtained not only among the common people, but were admired and venerated by even educated classes of the community. Judicial astrology, then, had its birth in a heathenish age, deriving all its peculiar characteristics from mythology, extravagant fables, and superstitious beliefs. It neither does, nor could it possibly, lay claim to any aids from inspiration. Several astrological writers were quoted, to prove from their own works their ignorance relative to matters around them, while impudently affecting an intimate acquaintance with planets millions of miles off, rolling in immeasurable space, and setting up as a complete system of starry influences a method of calculation that omits, because it has no rational means of estimating their value, the discoveries of the last two centuries. A fair example was thus furnished of the arrogant assumptions of ancient astrologers, magicians, and sorcerers—men incompetent to elucidate the ordinary phenomena of nature, and yet arrogating to themselves an amount of preternatural knowledge beyond the weakness of human nature to attain. Their modes of procedure, their symbols, angels, horoscopes were set forth on large diagrams, which greatly assisted in comprehending that portion of astrological empiricism. Of alchemy, as the parent of chemistry, the lecturer gave a short history, which can be traced to the 8th century, but the adepts always claim for it a remote antiquity, even to Adam. Its principal object was the discovery of *the Philosopher's Stone*, and *the Universal Solvent*. In these futile researches much labour was expended, the adepts appearing to possess untiring industry in working with furnaces, crucibles, alembics, and other apparatus. The secrecy of their operations, and the same carried out in their writings, composed in a mystical kind of jargon, favoured designing men, who laid claim to the impossible discoveries patiently and devoutly sought by many genuine adepts. Many of their tricks were enumerated and exposed, and their books reviewed in a brief manner, to show the hopelessness of reaping any information from such barren stores of mingled truth and quackery. Of the three famous mathematical problems, the first, that of Squaring the Circle, was shown to be as nearly worthless as possible, as any method absolutely correct could not show a gain on present methods exceeding a grain of sand, or, as Arago declared, so much as a mite would occupy. The diagrams showed, among others, the demonstration offered by Mr. James Smith, a retired merchant, near Liverpool. Of the second, the Duplication of the Cube, the explanation was

given by diagrams, particularly the demonstration by Mr. Oliver Byrne, an eminent mathematician; and the third, the Tri-section of an Angle, it was stated could only be accomplished by means of the conic-section, and some other curves. Of Perpetuum Mobile, or perpetual motion, it was declared to be a problem dating before the Christain era, but not known to have been mechanically attempted earlier than the 14th century. The wheel of the Marquis of Worcester, exhibited about 1630-41, and another shown at Hesse Cassel, by Orffyreus, were named as being the most renowned. The fallacy of all such schemes was illustrated and explained by diagrams And, in conclusion, it was observed that a larger number of such chimeras might have been adduced, but the present might serve as a warning to the unitiated to beware of blind guides, men of imperfect learning, and who endeavour to atone for their ignorance by their arrogance and unwarranted enthusiasm; and who always retort on their opponents the charge of prejudice. Altogether it appeared, therefore, that although undoubtedly with many *knowledge is power*, yet it was to be feared that the mass of mankind favoured the delusion that *Ignorance is bliss*

Meetings of Mining Companies.

CAPE CORNWALL CONSOLIDATED TIN AND COPPER MINING COMPANY.

The annual general meeting of shareholders was held at the offices of the company, New Broad-street, on Oct. 31,

Mr. HENRY L. PHILLIPS (managing director) in the chair.

The notice convening the meeting was read.

The report of the directors stated that the operations at the mines within the past twelve months have been principally directed towards developing the Cape lode in the western part of the property, with a view of intersecting the caunter lode, and also in extending the levels in the eastern direction. In order to test the value of the same lode in the granite, or tin-producing stratum of the St. Just district. From the fact of copper ore having been m t with in the 70 some months since, near to the intersection of the small caunter lode, it was anticipated that but a short period would probably elapse before some important discovery would be made in that part of the mine. The improvement, however, unfortunately, did not last; and, notwithstanding the driving was continued upon the caunter lode for some distance, no further deposits of copper ore were found, although the lode at times was very considerably mineralised, and in every respect promised most favourably for a discovery. In order to expedite the cutting of the caunter lode, which forms so important a feature in the development of the property in the estimation of all practical men, it was decided to put out a cross-cut south of the level, in the hope of sooner meeting with the caunter. This cross-cut has been driven about 4 fms., and an important change appears to have taken place in this part, for the country through which the cross-cut is being driven has changed to a greenstone, which is always considered to exercise a most favourable influence upon the productiveness of lodes. This rock is exceedingly hard, and progress is, therefore, necessarily very slow; but the end in the cross-cut is strongly mineralised with iron pyrites and spots of copper ore; and it is the firm opinion of those who are conversant with the district that should the caunter lode be found contained in the greenstone rock, there is every probability of most important results being achieved. As to the eastern part of the mine, operations have been carried out principally with the object of cross-cutting north, in order to intersect the lode in the north part of the property, as well as ensuring good ventilation by sinking a winze from the 90 fm. level. At times some very excellent mineral has been met with, and it is very probable that good deposits may be found. The point, however, to which considerable interest attaches is the intersection of Wheal Owl lode, which it is anticipated will be shortly accomplished in cross-cutting from the 100 fm. level; and as this lode has been very productive in the adjoining mine (St. Just Amalgamated), it is only reasonable to assume that similarly good results will be here attained. When Wheal Owl lode is reached, this cross-cut will be continued, with the object of intersecting all the north lodes in the property. The end in the cross-cut is strongly mineralised, and showing indications of copper. It is no doubt a matter of disappointment that the caunter lode has not yet been intersected; but, as stated in last report, its position cannot be exactly defined, owing to the variation which more or less occurs in all mineral lodes. The cross-cut now being driven in the 70 may intersect it at any moment, and, judging from appearances, there is reason to believe the accomplishment of this object will not be much longer delayed.

The report of the agents (Capts. Richard Pryor and F. Hosking) stated that there is ample machinery and plant on the mine for the effectual working of the same, and the cost in future will be light; and if the important operations now going on are carried out, they do not hesitate in saying that they will result in opening up a valuable property, which will pay the adventurers for their long perseverance and outlay.

The CHAIRMAN said—It had no doubt been a matter of considerable disappointment that the expectations formed with regard to the development of the mine, and especially with reference to the extension of the 70 fm. level for the purpose of intersecting the caunter lode, had not ere this been realised. Although the precise direction of the caunter lode could not be determined with any degree of exactness, yet it was but right to infer, from the favourable indications observable from time to time, that the intersection would have been met before the present meeting. That desirable point, however, had not yet been attained, but the agent considered himself justified in stating the intersection might be shortly met with, and that was the opinion also of practical men in the neighbourhood of the mine. For this reason the driving upon the Cape lode had been for the time suspended, and a cross-cut had been put out in the 70 fm. level south, where an important change had taken place in the character of the ground. Until this cross-cut was commenced greenstone had not been met with in any part of the mine, and those who were familiar with the results realised in the neighbouring mines from lodes found in greenstone would at once see the importance and value of finding that description of rock in Cape Cornwall. The caunter lode was found only in the land; therefore, to judge of its direction under the sea was necessarily problematical, and the more particularly as all lodes were subject to variation as regards direction; but, under any circumstances, it could not be long before it was reached—Capt. Pryor computed it might be reached in a few weeks' time. But as a matter of fact, it was satisfactory to find that the cross-cut was mineralised, and should the lode be cut in the greenstone rock there was little doubt but that it would be found very productive for copper. As to the eastern portion of the sett, a cross-cut had been put out to intersect the lode which was so productive in the neighbouring mine, and Capt. Pryor informed them that an important change had taken place, the ground being more favourable for driving, and a branch of ore having been cut underlying towards the lode. He need not upon the present occasion recapitulate the encouraging features possessed by the Cape Cornwall Mine, but he would repeat that there was, perhaps, no mining property that ought to be so successful, considering its mineralogical characteristics, and that it is traversed by lodes which in the adjoining mines had been and still were so productive. To prove the Cape, they had been extending their operations for something like three years, but during that period the lode had kept so poor that but little returns of mineral could be made, although the mine promised so well. All he could say was that he was largely interested in the mine, and although so far as the development had gone the results had been to him a source of considerable disappointment, yet he had by no means lost faith in the eventual success of the enterprise. (Hear, hear.) He then moved that the report and accounts be received and adopted.

Mr. WARD seconded the proposition.

Capt. RICHARD PRYOR, in reply to questions from different shareholders, stated that the branch cut in the eastern part of the mine was dipping rapidly towards the lode, and since he inspected the point a further considerable improvement had taken place—at least, such was the information he had received from the underground agent. When he saw the branch it contained spots of mundic and copper; and he was of opinion that the first lode cut would be the Wheal Owl lode, which had been so productive in the neighbouring mines. There were three lodes they were certain to cut, and he did not hesitate to say that there was not a better speculation in Cornwall than the putting out of the cross-cut to reach them. Such was the opinion of it in the district that if the present company had not done it it would most certainly have been done by others. There was sufficient ventilation to enable them to cut the whole of the lodes, and they could be developed without any further machinery. He might add that three lodes would be intersected by driving the cross-cut, and, as he had already stated, the ground had undergone a very favourable change since the branch was cut. The 70 fathom level cross-cut west partook somewhat of the character of a speculation in this respect—that the lode might be intersected in a month hence, or they might have to drive some fathoms.

The CHAIRMAN said that when he was underground about six weeks since the ground was exceedingly hard; but, from all the information he had been able to glean, he did not think there was much doubt but that the Owl lode when cut would be found productive; that assumption was materially strengthened, in his opinion, by the fact that it was near the junction of the granite and killas. The same lode in the adjoining mine was yielding 400*l.* worth of ore per month. There could be no doubt that the cutting of the three lodes was a most material point, and they were certain to be cut, because they were seen at surface. The speculation, therefore, was as to the results the lodes would realise when intersected.—Capt. PRYOR said there could now be little doubt, he thought, as to what those would produce, seeing the improvement that had recently taken place in the character of the ground.

A SHAREHOLDER, who had been associated with the mines in the St. Just district for many years, mentioned the fact that Botallack was at one time on the eve of being abandoned, when some greenstone was met with, and the following year 24,000*l.* was paid in dividends. He had alluded to this circumstance to show the influence that greenstone seemed to have upon the productive capabilities of lodes in that district.

The CHAIRMAN, in reply to a question from Mr. Douglas, stated they were obliged to use the Cape lode, so to speak, as a means of intersecting the caunter lode.—Mr. FREEMAN asked if it were proposed to continue the driving of the cross cut?—Capt. PRYOR said it was not only proposed to continue that, but he regarded it as a point of importance, simply because the same lode was so productive in the adjoining property. He considered the general indications warranted him in stating that Cape Cornwall would yet well repay the shareholders for their outlay.

Mr. SIMPSON asked if it were considered that the capital would be sufficient?—The CHAIRMAN said the capital would, no doubt, be sufficient to test the important points now in operation. The plant and machinery were equal to all their requirements.

Capt. PRYOR mentioned that 3 tons of tin per month would at least pay the whole cost of the mine, if they could obtain that quantity.

After some further discussion, the report and balance-sheet were received and adopted unanimously. The retiring director was re-elected, and Mr. Warwick was re-appointed auditor.

A vote of thanks was passed to the Chairman, which terminated the proceedings.

ST. JUST AMALGAMATED MINING COMPANY.

The annual general meeting of shareholders was held at the offices of the company, New Broad-street, on Oct. 31,

Mr. HENRY L. PHILLIPS (managing director) in the chair.

The notice convening the meeting was read.

The report of the directors stated that the development of the property is proceeding upon an extensive scale, and that they consider there is every reason to expect that remunerative results will be attained. It is satisfactory to find that the lower levels in the mines retain their value, and it is believed that the lodes will gradually improve in productiveness as the workings are extended. The total quantity of black tin raised from the mines since the last accounts were presented has been 242 tons 1 qr. 24 lbs., which, with the exception of 11 tons 1 cwt. 5 lbs. of "leavings" tin, has been sold at an average price of 53*l.* 13s. 4d. per ton. The present condition of the mines indicates progressive improvement as well as permanent productiveness; but the directors regret to have to state that the very low price of tin has operated most unfavourably with respect to profitable returns. The result, however, of the recent sale in Holland of Banca tin is indicative of a more active demand for that metal at increased prices, and it is anticipated that a beneficial effect will be produced thereby upon the tin produced from the Cornish mines. The question of profitable results is entirely contingent upon the price obtained from the smelters. New leases have been obtained, and the boundaries of the various properties, after being carefully surveyed by Mr. Henderson, C.E., of Truro, have been agreed to and defined.

The report of the agents (Capts. Richard Pryor, W. White, and R. Wearne) stated that the fixing of the pitwork, skip-roads, &c., in Phillip's and Saveail's engine-shafts, together with the repairing of the boilers, purchasing a new whim-rope, extending the dressing-floors for slime tin, &c., have cost several hundreds of pounds extra, but all the machinery and plant are in good working order; and within the last twelve months they have laid open a large extent of ground, which has placed them in a good and sound working position. The mine, as a whole, never looked so promising as at present: of course, like other mines, the low price of tin has been much against them; but should the Eastern Mine turn out as well as they expect, so as to pay its way, they have every reason to believe that they will leave a profit to the adventurers, and with a little further development open up a property second to no mine in this locality.

The CHAIRMAN said he met the shareholders upon the present occasion with feelings of satisfaction, alloyed somewhat with disappointment—satisfaction that the mine had opened out in a manner at least equal to anticipations; disappointment, because the ore when returned had realised a price so much below its nominal value, which he need hardly say was a circumstance entirely beyond the control of the executive, although one that had militated against the remunerative progress of the enterprise. At the time the report of the directors was issued the effect of the sale of Banca tin in Holland, which always operated so considerably upon the value of that metal, was not known; but since its publication a demand had sprung up, and an advance taken place equal to at least 3*l.* per ton in favour of the St. Just produce. As to the mines, they were opening out most satisfactorily at all points. As compared with the previous report, there had not been a falling off at any one point—on the contrary, the bottom part of the mine was not only looking as well as it did twelve months since, but had really improved, and that was the most important point in the mine; as to the eastern part, however, the returns had not materially assisted the general expenditure. They possessed a very extensive property, and had many important lodes to work upon; and as an evidence of the manner in which the development was progressing, he might inform the shareholders that over 200 hands were employed, and large quantities of tin were being raised; and had the value of tin only continued what it was at the time the mine was started, the shareholders would at the present time be in the receipt of very handsome dividends. The whole question as to whether profitable results could or not be realised depended entirely upon the price of tin; but tin at any price over 60*l.* per ton would leave a good profit, so that if the present price continues he hoped that a dividend would be earned by the next meeting. It was not too much to say that the general prospects of the enterprise, whether as regards the present or future position of the mine, or the general aspect of the tin market, were in every respect encouraging. (Hear, hear.) He moved that the report and balance-sheet be received and adopted.

Mr. ELLIS seconded the proposition.

Mr. POWER wished to know how the item of 15,335*l.* was made up?

Mr. WARWICK (the auditor) explained that 848*l.* had been paid for dues, 3192*l.* for materials, and the remainder (11,295*l.*) for labour cost in developing the mine.

A SHAREHOLDER said it would appear from that statement that the sales of tin, realising 13,034*l.*, had, in fact, exceeded the amount expended in labour.

Mr. WARWICK said that such was the case.

Mr. POWER would like to ask whether the item of 3192*l.* for materials was not an outlay for permanently opening the mine?

Capt. RICHARD PRYOR: Most certainly: and added that he was glad to be in a position to inform the shareholders that during the last twelve months they had discovered more tin than they had taken away—in other words, that they had been gradually increasing the reserves.

A SHAREHOLDER asked at what depth the neighbouring mines found their great deposits of tin?

Capt. PRYOR said they were only now arriving at the point at which Botallack, Wheal Owles, and all the rich mines in the district began to "make" their richer deposits of tin. Therefore, the chances at St. Just during the coming year, with the present price of tin, were in favour of making a satisfactory profit. He thought that at the next meeting the mine generally would be in a very much better position than at the present time, and that before that period regular monthly profits would be realised. (Hear, hear.)

A SHAREHOLDER asked when profits might be expected?

The CHAIRMAN said that depended entirely upon the price of tin. The mines were now in a position to enable them to raise a large quantity of tin—indeed, they were raising a large quantity (16 tons of black tin monthly). Without making any invidious comparison, it was not too much to say that but few mines could do that, and at the same time gradually increase the "reserves." His opinion was—and he did not speak without some knowledge of the subject—that the price of tin would improve—indeed, as he had already mentioned, since the publication of the directors' report foreign tin had advanced in value something like 8*l.* per ton. There was reason to hope that tin would further advance in value, and that from the impending improvements in the mine more productive results would be realised.

The motion adopting the report and balance-sheet was put and carried unanimously. The retiring director was re-elected, and Mr. Warwick was re-appointed auditor.

A vote of thanks to the Chairman and directors concluded the proceedings.

UNITED MEXICAN MINING COMPANY.

The half-yearly general meeting of shareholders was held at the offices, Winchester-street, on Wednesday,

Mr. CHARLES MORRIS in the chair.

Mr. W. M. BROWNE (the secretary) read the notice convening the meeting.

The report of the directors stated that the operations in the mine of Jesus Maria y Jose during the six months ending June 30 have resulted in a loss of $13,332, attributable in some measure to interruptions occasioned by a scarcity of workmen, and a temporary influx of water. Mr. Furber, however, has given a more hopeful account of the prospects for the current half-year.—Mines in the Guadalupe de la Oscura District: In the six months to June 30 last the outlay on these mines amounted to $8500, and the company's share of the sums received for ore sold was $1078. Since the general meeting, on May 6, the shaft of El Oro in Encinillas has been cleared to the bottom, and found to be 104 metres (113 yards) deep. The frentes from old workings have produced some small parcels of rich ore. The difficulty of obtaining miners in this outlying district, and the necessity of avoiding the expenditure of money, have compelled Mr. Furber to restrict the operations in this property to the El Oro shaft and its vicinity, in which there are appearances of great promise. Mr. Furber, writing on Aug. 31, says, "In the El Oro planes (deepest workings) in Encinillas, the ore has improved, and will pay for a good part of the outlay." On Sept. 21 he says—"In the Oscura district little is doing, but our outlay there is very moderate, and some good ore is coming in to meet a portion of our expenses."—Haciendas, or Reduction Works: The profit in the half-year to June 30 has been estimated by Mr. Furber at $14,449, and a continuance of good profits in this branch of the company's operations may be expected.—New Mines: The directors cannot positively announce the completion of the contract for the new property connected with the adit of San Cayetano; but Mr. Furber, in his letter of Aug. 31, says, "The contracts will be made out shortly, and I hope by English packet to inform the board that we are in possession of ground extending half a league along the main lode." On Sept. 21 he writes, "The San Cayetano contract is already signed by a majority of the owners.—Finance: The amount of available funds in the hands of Mr. Furber in Mexico on Sept. 21, the date of his last report, was $28,479, and the estimated value of tortas and ores on hand and under reduction $48,718. The proprietors will observe from what has been stated that the old mines of the company have not been profitable during the past six months, but that there are expectations that a better account will be rendered in the next half-year. On this subject the directors have written very earnestly to Mr. Furber, as they are most anxious to carry out the intentions of the shareholders and themselves, that the money raised by calls should be devoted entirely to the working of the new mines in connection with the adit of San Cayetano. Mr. Furber's reply to the directors is consistent with his high character for prudence and good management. He adopts the views of the directors, and is striving to carry them into effect. As regards the new property, the directors have to state that the call made on July 1 remains in act, and that they do not deem it necessary at present to make another. It is probable, however, that early in the ensuing year they may have to convene an extraordinary general meeting, for the purpose of making a second call, as Mr. Furber is desirous of pushing on the work vigorously, a course which the directors fully approve.

The CHAIRMAN said that, since the last meeting no feature of importance had occurred to which he need specially call attention. The directors had hoped to be able to state that the contract for the San Cayetano had been concluded; there was, however, no doubt that by the next mail they would hear that everything had been settled, and that the company would be able to take possession of the property and to work it vigorously. In the meantime the works were going on, so that no time was being lost, and they had every reason for believing the works were approaching that part of it in which they might look for a successful issue. He moved that the report and accounts be received and adopted.—Mr. PALGRAVE seconded the proposition.

The CHAIRMAN explained, in answer to the remarks of some proprietors, that another call would probably not be made till March, and that the capital so subscribed would be employed exclusively for the new mines.

Mr. PHILLIPS (a director) said that Mr. Furber had no doubt whatever but that the contract would be concluded; and Mr. Furber informed them that in the meantime the present proprietors were pushing on the work of the adit.

The CHAIRMAN said that Mr. Furber was naturally anxious to secure the property upon the best terms that could be obtained.

Mr. PHILLIPS, in reply to a question, stated that the new mines were situated about midway between the mine of Jesus Maria and Guanaxuato, at a distance of about 2½ miles. Nothing could be more favourable than its situation.

The report and accounts were received and adopted. A vote of thanks to the Chairman and directors terminated the proceedings.

PERUVIAN MINERAL COMPANY.

A special general meeting of shareholders was held at the offices, Old Jewry, on Wednesday,—Mr. G. CHARLWOOD in the chair.

Mr. HARRIS (secretary) read the notice convening the meeting.

The report of the directors stated they regretted to have to announce that they have received information from their agents at Iquique of the destruction by the earthquake of the company's property there, consisting of stamping and amalgamating apparatus; cost of picking desmontes at Huantazaja, and transporting the same to Iquique; desmontes in stock at Iquique, containing 22,000 ozs. of silver, the result of two day's work; 300 ozs. of silver; quicksilver, 150*l.*; all implements, tools, &c., and the agent's personal property and effects. Looking at these results, and the experience gained by the company's agents in Peru, the directors think there is every prospect of a satisfactory result attending future operations. They, therefore, suggest the following plan to the shareholders of raising additional funds for that purpose:—Resolved: That the progress made with the operations of this company up to their interruption and destruction by the earthquake affords the best grounds for anticipating that the objects of the company may be accomplished with highly profitable results. That in order to provide the requisite funds to carry out the operations now recommended by the company's manager at Iquique, a sum of 2400*l.* be raised by the issue of 60 debentures of 50*l.* each, 3000*l.* in all, bearing interest at 10*l.* per cent., redeemable at any time at the option of the company. That the issue be a first charge on all the property and profits of the company; that the price of issue be 40*l.* each, payable as follows:—10*l.* on application; 10*l.* on Jan. 1, 1869; 10*l.* on Feb. 1, 1869; 10*l.* on March 1, 1869: and that the holders for the time being are to be entitled to have the same redeemed by the company at par in five half-yearly drawings, on Jan. 1 and July 1 in each year, commencing on Jan. 1, 1870. That in the first instance the same be offered *pro rata* to the holders of the share warrants of the original 120 shares not deferred. That the holders of share warrants for the deferred 240 shares be then entitled rateably to the debentures not so taken up.

The CHAIRMAN said that it was his unfortunate duty to inform the proprietors that by the unparalleled calamity in South America the board had been deprived of funds to continue the operations of the company. It was, no doubt, most unfortunate to find, after the capital had been expended and there was a fair prospect of profitable returns being realised, the results of their labours snatched from them, as it were, in a moment; but he thought, looking fairly at the present state of affairs, finding that, owing to the economy and energy displayed by their agent, he had been able to report to the board he had with the small capital at his command erected stamping and amalgamating machinery, that he had collected desmontes, containing 22,000 ozs. of silver, which were ready for shipment when the earthquake occurred, that 150*l.* had been expended in labour, and that the machinery, working only two days before the earthquake swept all away, had extracted 300 ozs. of silver—he thought, looking at those facts, and that their agent had acquired a vast amount of very valuable information and position in the country, there was ground for believing that the enterprise could be yet conducted to a successful issue. He considered that they should congratulate themselves that things were not worse, for it was hardly possible to suppose both of their agents could have escaped with their lives. Such, however, he was happy to say, was the case, and the directors, after having considered and duly weighed every point, were of opinion that, with the assistance of moderate funds, they would still be able to carry the company to a remunerative condition. He then moved a resolution embodying the terms expressed in the directors' report.

Mr. STEVENS seconded the proposition.

Mr. BOLLEART stated that the condition of the labour market would not affect the operations of the company, the labourers employed being Indians, who came from the interior to the mines. It was only the desmontes that had been operated on that were lost by the earthquake; the untreated desmontes, which were practically unlimited in quantity, were situated at an immense altitude, and about seven miles from where the earthquake wave came in.

The resolution, was put, and carried unanimously.

The CHAIRMAN mentioned that the directors had subscribed for nearly a quarter of the debentures.

A vote of thanks to the Chairman and directors terminated the proceedings.

VANCOUVER COAL MINING AND LAND COMPANY.

A general meeting of shareholders was held at the London Tavern, Bishopsgate, on Tuesday,—Mr. JOHN GALSWORTHY in the chair.

Mr. S. M. ROBINS (the secretary) read the notice convening the meeting. The report of the directors appeared in last week's Journal.

The CHAIRMAN said that with reference to the report just read one of the shareholders had criticised it, and had termed it a very meagre document, stating, however, that he was very well satisfied with the fact that the directors were able to show they would pay a dividend, which he (the Chairman) knew covered a multitude of sins. Upon the first blush of the thing, the criticism of the shareholder to whom he had referred would appear to be just, but it should be borne in mind that it was not always desirable to report the actual details of the operations of a company, and the more especially in their case, because the effect might be to bring about competition in the way of new mines, and also more difficulties with their labour. The labour question was a very ticklish one, and, consequently, the report if it had gone into details might have rendered the company open to some difficulty in Vancouver. If, however, any shareholder were desirous of ascertaining any information with respect to the management of the company or the cost of production it could always be ascertained by seeing Mr. Robins at the office. Some reference had been made to what was called the sudden prosperity of the company, and upon that point he might state that the prosperity was by no means so sudden as it appeared to be, because three years ago, when the reconstituted board adopted a new policy—that is, instead of a lavish expenditure in a wrong direction a judicious expenditure in a right one—there had been a gradual reduction of the liabilities until they had got a clear balance-sheet. Three years ago they had a director—he had retired—who had had a great deal to do with the affairs of the company, and not to its advantage; that gentleman's nominee remained financial agent, at a salary of 1000*l.* a-year. Financial agent being only another term for getting rid of money, that gentleman's services had been dispensed with; in addition to this, when the present board came into office there was a debt of 14,000*l.*, for the payment of which a call of 1*l.* per share was made, and there was on the debit side, on account of the Hudson's Bay mortgage, an amount of 15,000*l.* Now, however, he was glad to inform them that all those debts had been got rid of, and at the present moment the company did not owe one shilling. (Hear, hear.) On the other side, the loss upon the Fideliter had been written off. They had to write off about 4000*l.* on merchandise account for a parcel of rubbish taken over from the Hudson's Bay Company; the amount now stood at about 2000*l.*, which was represented by good things instead of bad. They had also got rid of the item for preliminary expenses, and the agent at Nanaimo had been removed to San Francisco, where there was a better field for him to develope the abilities he possessed. They for some time gave their secretary 400*l.* a-year, and afterwards 300*l.*—that had been absolutely abolished, by consolidating the office of secretary and accountant. The office rent stood at 100*l.* a-year instead of 200*l.*, and the directors' fees instead of being 1000*l.* were 500*l.* a-year. During the three years of the present board they had lopped off every item that was so burdening the company, and brought it into such a state that they were able to divide a considerable proportion of the profits among the shareholders, having the money in hand wherewith to do it. (Hear, hear.) The present prosperous condition of the company had been brought about by a development of its connections, and by a better demand being obtained for their coal; and he was glad to be able to say that the demand was still improving, and the connections of the company were extending. Besides this, they were opening out a new field of coal, and he hoped to be able shortly to report that they had really succeeded in opening out a very large additional field. As to the demand for their coal, it had really been greater than the supply, which made the directors the more anxious to open out this new field. He believed the demand would go on increasing, and if they succeeded with regard to this new field they would, unquestionably, possess a very fine coal-producing property. The sales during the last half-year had been very nearly equal to those of the whole of the previous year; and, although during the present half-year they had not been quite so large, they were still going on very fairly. As regards the undivided balance of 12,000*l.*, it was proposed to pay a dividend of 10 per cent. for the half-year, and to carry forward 3000*l.* towards the formation of a reserve fund. The board considered that in a property of this description a reserve fund was absolutely necessary, because the mining field so far as opened was, of course, being gradually worked out; therefore they must seek for other fields, and expend considerable money in opening out new sources of supply. The board desired to avoid calling upon the shareholders for further capital; and he thought they would have no difficulty in going on with the capital called up. Under these circumstances, the formation of a reserve fund was absolutely necessary, to enable the directors to meet contingencies that may arise in opening new fields, or in equalising the dividends. Therefore, the shareholders would, no doubt, agree with the board in setting aside 3000*l.* towards the formation of a nucleus of a reserve fund. He next came to the question of secretaryship—it was his feeling that they were entitled to, and should have their own office and their own officer. It was not satisfactory to him, nor he believed to some members of the board, that they should only be partakers of an office, his desire being that they should have an office of their own and a secretary exclusively to themselves. When a resolution to that effect was passed by the board, Mr. Crace, who had formerly acted as secretary, found it incompatible with his interest to continue to act for this company alone, and accordingly he resolved upon retiring from the company, when Mr. Robins, who had filled the office of accountant, and who had all the affairs of the company at his fingers' ends, was appointed; and he (the Chairman) was sure both offices would be very ably filled by Mr. Robins, and the business of the company well conducted. As he had already said, that change involved the retirement of Mr. Crace, and, therefore, the directors were prepared to recommend that he should be compensated, by voting him the sum of 300*l.*, being one year's salary. In addition to which a six months' notice had been given to him. With the exception of a few statistics, he had now gone through all the matters relative to the results of the improved management during the last three years, which he need hardly say had been mainly brought about by the active co-operation of his friend, Mr. Wild. Nothing could be more satisfactory than the way in which Mr. Wild had discharged the duties which devolved upon him; and, perhaps, he could not adduce a better proof of the value of those services than by mentioning the fact that the cost of putting the coal on board ship during 1865 was $4 19 c., whereas during the last six months of 1868 it was only $3—a great deal of that satisfactory result was due to the management which Mr. Wild established while at Vancouver. Of course, the larger the amount of sales the less was the cost of production; therefore, something was due to increased sales. During the last half-year of 1868 the coal realised about $6 per ton, whereas in 1866 it realised $5, a great deal of which was undoubtedly owing to Mr. Wild's arrangements, and the manner in which he had opened up a trade with San Francisco. He (the Chairman) then proceeded to read extracts from the reports of the manager at the colliery, from which it appeared that there were already 181,000 tons of coal won; and stated that, although the directors now proposed to pay a large

dividend to the shareholders, it should be borne in mind that the company had been established six years, and that when the present large dividend had been brought into the account it would give a return at the rate of only 6½ per cent. per annum from the time the company was established; of course, the results would have been more satisfactory had the management at the commencement been of a more effective character. Therefore, it was not to be supposed that the present board were about to abandon their notions of economy simply because they were going to pay a dividend of 10 per cent. for the half-year. He was very much disposed to curtail all their expenses until such times as it was rendered perfectly safe that they could be increased, if an increase was really requisite. Before he came upon the board he said he advocated that policy, and he thought shareholders would allow him the credit of having given a practical effect to his policy. (Hear, hear.) He then moved that the report be received and adopted.—Mr. HILL seconded the proposition.

The CHAIRMAN, replying to questions from different shareholders, stated that the manager's salary would not depend entirely upon commissions on the sales of coal, but he thought it very likely the board would have to reconsider that matter. He did not think the company had suffered any damage by the earthquake—he did not know that it had in any way disturbed the demand for their coal, and, at all events, it had not shaken the confidence of the board in the concern. As to the price of the coal, it was the same as during the previous half-year; and as to the retirement of Mr. Crace as secretary, he (the Chairman) certainly thought till that morning that Mr. Crace had elected to accept compensation for the loss of his office, and the board thought that the compensation should be 300*l.* As to the labour question, the company had suffered somewhat by the strike, having had to pay about 6d. per ton more. There was some difficulty with regard to the Chinamen and Indians doing the work of skilled labourers. As they might be subject to these strikes, he might state that in case of any display of a disposition to strike steps would be taken to counteract the effort by procuring labour in England—he added that they had already very high wages. As to the dividend, the directors had sufficient money in hand to pay it, and considerably more. As to the output of coal, it had been greater in July than it was in January; the current half-year had began better, in fact, than the beginning of the past half-year. As to the exchange, that was a "sort of thing that no fellow could understand;" the fact was, the expense of getting the money home cost 500*l.*, or 1¼d. per dollar.

The motion adopting the report and balance-sheet was put, and carried unanimously. A dividend of 10 per cent. for the half-year was declared, and 3000*l.* was carried forward to the formation of a reserve fund.

The sum of 300*l.* was voted to Mr. Crace as a compensation for loss of the office of secretary.

A vote of thanks to the Chairman and directors terminated the proceedings.

Original Correspondence.

NEW SYSTEM OF IRON AND STEEL MAKING—No. VI.

BY G. J. AND T. C. HINDE.

The spiegeleisen previously referred to, though commonly classed with pig iron, is a metal very different to ordinary pig iron, both in appearance and properties. It has a brilliant white, highly crystalline fracture, and contains combined carbon in much larger percentage than ordinary pig iron, and also metallic manganese, in quantities varying considerably in different samples, but in some instances stated to reach from 12 to 14 per cent. Its introduction to British metallurgy is due to Mr. Robert Mushet, who patented its application for remedying the defects in iron "purified and decarbonised by being treated with currents of air," in September, 1856, but the patent was suffered to lapse through non-payment of the third year's duty. Up to the period of Mr. Mushet's patent lapsing, the Bessemer process though stated to have succeeded when operating on spiegeleisen, or on the pure charcoal-smelted cast iron of Sweden and Russia, had failed to produce either steel or malleable iron from British coke-smelted pig iron. In principle Mr. Mushet's plan is absolutely identical with those of Heath and Vickers, which consist in melting malleable iron along with carbon and manganese, but Mr. Mushet applied his carbon and manganese by the more convenient method of melting speigeleisen, and then pouring it into the Bessemer product. We shall see hereafter what are the causes which render necessary this addition of carbon and manganese to the Bessemer product; at present it will suffice to state the fact that, though the pig iron used for the Bessemer process is made specially from selected ores, and costs fully 20 per cent. more than ordinary pig iron, it is yet found impracticable to make either steel or malleable iron from it by the Bessemer process *simpliciter*, the carbon and manganese addition being indispensable. The lapse of Mr. Mushet's patent, of course threw it open to all, and Mr. Bessemer was free to supplement his own pneumatic process with Mr. Mushet's spiegeleisen addition. But it does not appear that Mr. Bessemer understood either the means of curing the defects of his process or the real action of the spiegeleisen. If he had he needed not to wait for the expiration of Mr. Mushet's patent, as although the addition of spiegeleisen was the most convenient means of imparting carbon and manganese to his product, other available methods of doing the same thing were open to him, which in no way whatever trenched on Mr. Mushet's patent. All Mr. Bessemer had to do was to devise a suitable means of applying Heath's or Vickers' expired patents to the different conditions of his own process. On the other hand, it is difficult to believe that Mr. Mushet himself appreciated the full value of the spiegeleisen addition to the Bessemer product, or whatever fate befel the remainder of his multitude of patents, he would certainly have paid the 50*l.* duty necessary to keep this one alive.

Having pointed out the distinctive features of the processes we named at the outset, we will now eliminate the more manifestly defective from the list, reserving the best of each group for final comparison of results. The German steel and puddled steel processes need but few words. They are both wasteful of iron, entirely depend upon the skill and judgment of the workman, and have the insuperable objection that the resulting steel is defective and uncertain in quality. The Uchatius process is applicable only to pig-iron smelted from the spathose or sparry carbonate ores, and is, therefore, out of the question in this country. The Bessemer process, consequently, remains as the most available representative of the first group. In the second group we have the mis-called direct processes. These are only applicable to selected pieces of iron ore of the finest quality, as they make no provision for removing any earthy matter, and they involve two processes, both of them expensive—the cementation, and the melting in the crucible. It is manifest, therefore, that however good may be the steel made by these processes, they are far too limited in their range ever to become the bases of an extended manufacture. The recently proposed Siemens process for melting malleable iron with the description of cast iron called spiegeleisen is, as we mentioned when describing it, simply a reproduction of Heath's and of Vickers's plans, the melting, however, being performed in a Siemens regenerative furnace, instead of the crucible. It is proposed to melt up worn-out rails in this manner with spiegeleisen to form steel. To those practically acquainted with the manufacture of modern rails, composed as many of them are, of a top and bottom slab of moderately good iron, and the middle of cinder iron, puddled bar ends, and all the refuse which can be got to hold together, it will not be necessary to say what sort of steel will be produced from melting old iron rails of this quality. But if the best malleable iron, such as the Sheffield makers use in their method, be melted with spiegeleisen in a Siemens regenerative furnace, it will be a mere question of the relative advantage and convenience of the Siemens furnace compared with the crucible—a question yet remaining to be decided by practice on the large scale. We have now, therefore, the Sheffield plan of cementation, or of melting malleable iron with carbon in the crucible, as the best representative of that group of steel-making processes which operate on the principle of adding carbon to malleable iron, and we have the Bessemer process as the best representative of the group which operate on the principle of reducing the quantity of carbon contained in cast iron down to the steel-forming point. But before we proceed to analyse and compare the results obtained under these two processes, and to demonstrate the true principle of steel-making, it will be desirable to consider what is the steel question of the future. We think we may safely say that it is the conviction of all who are practically acquainted with the relative properties and serviceable qualities of iron and of steel, that steel will ultimately supersede iron to a very large extent, and this is not a mere matter of opinion, as we have some data to go upon. Prior to the introduction of the Bessemer process cast steel was worth 40*l.* per ton; an equal quality made by the Bessemer process is now sold for 13*l.* to 14*l.* per ton. The number of processes involved in making the cast steel of that day was always five, and sometimes more. The ore was smelted into pig-iron—the pig iron refined into a rough or forge bar. This forge bar cut down, piled, re-heated, and formed into a mill or finished bar. This finished bar underwent the cementing process to form blister steel, and this blister steel was broken up and melted in crucibles into cast steel. When the very finest qualities were required, the piling and re-heating processes were repeated, sometimes once, sometimes twice; and after these repeated re-heatings the unmanufactured ingot of cast steel was worth 50*l.* per ton. Mr. Bessemer's plan, instead of five processes, needed but two—one the smelting of the ore into pig iron, and the other the oxidation and the removal of the alloy from the pig iron down to the cast steel-forming point; and the price fell from 40*l.* per ton to 14*l.* We shall be much understating the effect of this reduction in price if we say that ten times more cast steel is now produced by the Bessemer process than was formerly made altogether. But if a reduction from 40*l.* to 14*l.* per ton has been followed by a tenfold demand, what may we not expect if good cast steel can be supplied at a price little, if at all, exceeding that of the best malleable iron? The superiority of good cast steel over even the best malleable iron is so great, for the majority of uses to which iron is applied, that if such a reduction in price could be made it would probably be much under the reality to assume that one-half of the present quantity of malleable iron would be replaced by steel. The steel question of the future, therefore, is—first, how to bring about such a reduction in cost that the price shall no longer be an obstacle in the way of its adoption for those purposes for which it is superior to malleable iron; and, next, how to supply the enormously increased demand which would be created by this reduction in price. This is the steel question in its commercial and industrial aspect, and we shall now, therefore, be in a position to test existing processes, not only as to their correspondence with, or divergence from, the true scientific principles which should govern the manufacture, but we shall also be able to ascertain to what extent these processes are capable of fulfilling the commercial and industrial requirements of the position.

We have seen that the blast-furnace manager, owing to the present unscientific smelting operation, is unable to ensure certainty or uniformity of product; and, indeed, more than this, he not only cannot ensure a quality suitable for the Bessemer process, but he actually cannot tell whether he has produced such or not until the pig iron is cooled, and its quality judged by the fracture. Hence the necessity for re-melting the pig iron for the Bessemer process; and to prevent contamination of the iron with the impurities of the fuel, this re-melting must be performed in a reverberatory or air-furnace, in which the fuel is separated from the iron, a much more expensive process than melting in the cupola, this last, however, being inadmissible, from the fact that the quality of the iron is injured by the sulphur from the fuel, with which it is mixed. But cast iron cannot be re-melted in an air-furnace without considerable oxidation and loss, and here we have the first source of the waste of the Bessemer process. It is even now boldly stated as a fact that oxygen will combine with the silicon and carbon contained in cast iron without attacking the iron itself. This "fact" is purely imaginary, and it is somewhat late in the day to be obliged to contradict the statement, seeing that Mr. Bessemer himself says, in his patent, that "the requisite high temperature of such mode of action is obtained by the oxygen uniting with and causing a combustion of the carbon contained in the crude iron, and also by the combustion of a small portion of the iron itself." How much that "small portion" was Mr. Bessemer then had no means of knowing, as it could only be effectually ascertained by actual practice on the large scale. The fact is, that the oxidation of the iron commences the moment the oxygen is blown into it. Were this otherwise, the oxidised silicon would be present as free silica, a product not to be found in the Bessemer cinder, instead of silicate of the oxide of iron, a product which is always present in the Bessemer cinder. If additional proof were needed, it would be found in the large quantity of oxide of iron found in the Bessemer cinder, in the carbonic oxide gas given off when the spiegeleisen is poured in, this carbonic oxide being the result of the combination of the carbon of the spiegeleisen with the oxygen from a quantity of oxide of iron which is disseminated through the Bessemer product, and finally and conclusively in the loss of weight which invariably follows the Bessemer process, and which is largely in excess of the weight of the impurities of the pig iron, the difference being metallic iron, which is oxidised and wasted. The total loss by the Bessemer process is not less than fifteen to twenty per cent. of the weight of the pig iron used. Assuming the percentage of alloy in the pig iron at five per cent., we have therefore from ten to fifteen per cent. of the metallic iron wasted.

The Bessemer product from British coke-smelted pig iron cannot be considered steel at all, it being so red-short, and otherwise defective, that it will not roll or stand hammering; hence the necessity for the spiegeleisen mixture, the carbon and the manganese of this spiegeleisen having a great affinity for oxygen, combine with the oxygen of the oxide of iron present in the Bessemer product, and thus remove the fatal defect of "red-shortness." The use of spiegeleisen is, therefore, indispensable, and, of course, adds somewhat to the cost, and we cannot estimate the unmanufactured ingot of Bessemer steel to cost less than 8*l.* per ton, exclusive of patentee's royalty. Let us now investigate the results of the Bessemer process. To begin with a quantity of the purest hematite ore sufficient to produce a ton of pig iron, and containing only about five per cent. of earthy matter, can be bought at the furnaces in Lancashire for 25*s.* This five per cent. of earthy matter and the oxygen have to be removed from the ore, and one-quarter to one-half per cent. of carbon added to the metallic iron, in order to produce cast steel, and to carry out these requirements at least ten to fifteen per cent. of all the metallic iron is absolutely wasted, after having incurred the cost of bringing it into pig iron, and the 25*s.* the ore-ton of metallic iron cost, has grown into 8*l.* as the cost of the unmanufactured ingot of Bessemer steel; and owing to the inability of the Bessemer process to oxidise and remove all the impurities contained in ordinary British coke-smelted pig iron, it is found that the only iron ores in Great Britain adapted for the production of pig iron suitable for the Bessemer process are the hematites. But if the whole of the hematites were suitable, which is by no means the fact, they would be far from sufficient for meeting a demand which, as we have seen when the use of steel is no longer restricted by high prices, will be equal to at least one-half the present production of malleable iron. We have shown when treating of the manufacture of malleable iron, as well as when dealing with the Bessemer process, that the alloy in pig iron is intimately combined with the iron, that it is impossible to oxidise this alloy without at the same time exposing the iron to the action of the oxygen, and thereby causing oxidation and waste. This waste, therefore, is not the result merely of an imperfect mode of operation, but it is a radical and incurable defect, inherent in the principle of making steel by first combining the pure malleable iron of the ore with an excess of alloy, and afterwards oxidising and removing that alloy down to the steel-forming point. And if instead of pure carbon only the alloy consists also of sulphur and phosphorus, these impurities cling so firmly to the iron that the Bessemer process is entirely unable to eliminate them. The principle of making steel by oxidising and removing the alloy from cast iron is therefore opposed to scientific truth, and the Bessemer process, available only with one-sixth part of the British iron ores, involving a waste of ten to fifteen per cent. of the metal, and putting 500 per cent. on the cost of the ore-ton of metallic iron before the unmanufactured ingot of steel is reached, is clearly inadequate to the fulfilment of the steel requirements of the future.

It may, perhaps, be well here to briefly refer to another so-called "direct" process, though what meaning its propounders suppose the word "direct" to convey it is not easy to imagine, seeing that the process involves three distinct operations from the ore to the steel. Pig iron is melted, and poured into a vessel in the bottom of which nitrate of soda has been placed. The gaseous products from the nitrate of soda pass through the pig iron, and effect an oxidation of the carbon, but unlike the Bessemer process, the oxidation so effected does not afford the requisite heat for keeping the metal liquid, and hence it becomes necessary to incur the expensive operation of re-melting in a crucible. It has been announced with somewhat amusing gravity, that the process is chemical, not mechanical in its action, as if there were any possibility of removing the impurities from pig iron by other than chemical means. Surely the propounders of this plan do not imagine that Mr. Bessemer's process is mechanical because he employs a steam-engine to force the air through the molten iron! This process substitutes for atmospheric air forced through the iron by Mr. Bessemer's blast-engine, oxygen obtained from nitrate of soda, and a costly re-melting process in crucibles. However far the Bessemer process may be from perfection, it will not suffer by comparison with this; it is, however, asserted that first-class steel is produced from inferior pig iron by this process. Our own information of actual tests by no means supports this conclusion. Certainly it will be very surprising if any direct means of turning the worst cast iron into the best cast steel should ever be devised: a transmutation about as likely to be discovered as the one in pursuit of which the alchemists of old wasted their lives.

CHONTALES GOLD AND SILVER MINING COMPANY.

SIR,—As a shareholder I naturally peruse with interest every line which appears in the Journal concerning the Chontales Company. I must admit, however, that after reading your last number I was somewhat perplexed, but, probably, some of my co-shareholders, less obtuse than myself, will, after I have pointed out the ground of my perplexity, come to my assistance, and explain away the difficulty. A good deal has been said about "inconsistencies," but to my mind the greatest inconsistency is in that which appeared in a paragraph, apparently of an editorial character, as compared with what the Right Hon. the Earl Nelson, the Chairman, is reported to have said at the general meeting. The paragraph states that Mr. Belt's report is "full of *inconsistencies*." Earl Nelson states "that the directors' confidence in the remunerative success of the mines is *based* upon the fact that since Mr. Belt has occupied the position of manager, his statements have been fully verified. * * * That if Mr. Belt errs at all, it is on the non-sanguine side, *because he has been consistent throughout.*" Again, the paragraph says "that the present (Mr. Belt's) good reports are supplemented by estimates of disappointing results." The managing director (Mr. Noakes) is reported to have said—"that inasmuch as Mr. Belt has not taken away the whole of the ore ground laid open in Consuelo, it is possible some of the rich ores may yet be met with." Mr. Noakes adds—"Mr. Belt is perfectly safe in taking the general average of the ground; but upon that estimate, with that low produce, Mr. Belt will make *a profit of 50 per cent. upon the working cost, and, probably, more than that.*" In this computation I find that Mr. Belt "does not take into account the working of Pavon, and the alluvial washings, both of which he hopes will yield an additional source of revenue." Without adding any remarks, I will content myself by describing my position as— A PERPLEXED SHAREHOLDER.

[For remainder of Original Correspondence, see to-day's Supplement.]

FOREIGN MINING AND METALLURGY.

The imports of pig-iron and plates into France in the first eight months of this year compare as follows with those effected in the corresponding period of 1867:—

	1868.	1867.
Pig, duty free ..... Tons	63,447	32,083
Ditto, for shipbuilding	1,057	299
Ditto, with payment of duty	14,430	66,617
Total	78,934	98,999
Iron and plates, duty free ..... Tons	33,245	38,024
Ditto, for shipbuilding	7,735	2,608
Ditto, with payment of duty	8,697	4,693
Total	49,677	45,325

It results from these totals that the whole of the imports of pig—in which term we may include castings—into France in the first eight months of this year declined to the extent of about 20,000 tons, as compared with the corresponding period of 1867, the difference arising wholly in the imports with payment of duty, which are nearly five times less important than in 1867, while the imports by warrants have almost doubled. There is little difference in the totals as regards iron and plates, but the sensible increase observable in the imports with payment of duties, as well as in those on shipbuilding account, is remarkable. The total exports by warrants of pig, iron, and plates from France amounted in the first eight months of this year to 101,710 tons, against 79,439 tons in the corresponding period of last year, showing an increase of 22,271 tons in 1868. The direct exports were 13,980 tons this year, against 10,620 tons in the corresponding period of 1867, showing an increase of 3360 tons in the first eight months of this year. The quantities of minerals imported into France in the first eight months of this year compare as follows with the imports in the corresponding period of 1867:—

Source of supply.	1868.	1867.
Belgium ..... Tons	61,596	91,653
Germany	65,311	47,093
Spain	46,928	41,551
Italy	57,116	55,456
Switzerland	2,871	1,634
Algeria	123,414	126,974
Miscellaneous	405	452
Total	357,641	364,813

The difference between this year's total and that of last year will be seen to be not very material, although the figures for the first few months of this year were sensibly below those for the first quarter of 1867. In proportion as the condition of French metallurgy has improved, the difference in the imports of minerals has become less sensible, and there is now every reason to suppose that the results of the whole of this year will be superior to those for the whole of 1867. An official statement of the French Committee of Forgemasters informs us that the total production of the iron works of France, as well of pig-iron as of iron of every description, was as follows in the first six months of 1868:—Pig (casting), 134,113 tons; refining, 502,446 tons: total, 636,559 tons. Iron (miscellaneous), 294,975 tons; rails, 102,532 tons; plates, 46,446 tons: total, 443,973 tons. The whole of the metallurgical production of France in the first six months of this year was thus 1,080,532 tons. The quantity of Bessemer steel manufactured in France in the same period may be divided as follows between the works engaged in this special manufacture:—Terre-Noire Company, 7648 tons; Imphy St. Seurin Company, 5127 tons; MM. Petin, Gaudet, and Co., 3977 tons; Dietrich and Co., 757 tons; and Châtillon and Commentry Company, 590 tons: making a total of 18,069 tons. In this total rails figure for 10,562 tons. Some idea may be formed of the great development which the manufacture of Bessemer steel has acquired in France by a retrospect of the last few years. In 1863 the total production amounted to only 1857 tons, in 1864 it rose to 6751 tons, in 1865 to 9751 tons, in 1866 to 10,791 tons, and in 1867 to 19,893 tons. In the first six months of this year, again, the production has been almost equal to that effected during the whole of 1867. The Terre-Noire Company has now orders on hand for Bessemer steel to the aggregate amount of 90,000 tons, which are to be delivered during the next five years. This company is now in a position to produce 2000 tons per month, but after January, 1869, it will produce 3000 tons. Among the orders given out in France during the last two months the following may be mentioned:—150 tons of Vignoles iron rails, ordered by the Northern of France Railway Company from MM. René Hamoir and Co., at 7*l.* 2*s.* per ton; 2000 tons of Martin steel rails, ordered by the Orleans Railway Company from MM. Verdié and Co., of Firminy, at 13*l.* 11*s.* 3*d.* per ton; 3000 chairs, ordered by the same company from M. Doré, of the Mans, at 5*l.* 3*s.* 6*d.* per ton; 5000 chairs ordered by the Western of France Railway Company, from M. de St. Phalle, at 5*l.* 3*s.* 9*d.* per ton; 60,000 Vignoles fish-plates, ordered by the Orleans Railway Company from the Commentry Works, at 7*l.* 15*s.* 3*d.* per ton; 846 tons of Vignoles fish-plates, ordered by the Orleans Railway Company from MM. Boignes-Rambourg and Co., at 7*l.* 7*s.* 7*d.* per ton; 15 turn-tables, ordered by the Charentes Railway Company from M. Doré, at 132*l.* each; 65 iron crossings, ordered by the Charentes Railway Company from the Horme Company, at 12*l.* each; five iron (plates) bridges of spans ranging from 13 ft. 4 in. to 23 ft. 4 in., ordered by the Charentes Railway Company from M. Joubert, of Versailles, at 20*l.* 16*s.* per ton; 10 weigh-bridges, ordered by the Eastern of France Railway Company from Falcot, at 58*l.* each; a 6-ton crane, ordered by the Western of France Railway Company from the Fives-Lille Company, at 322*l.*; six similar cranes, ordered by the Orleans Railway Company from M. Claparede, of St. Denis, at 28*l.* per ton; 12 hydraulic cranes, ordered by the Orleans Railway Company from MM. Boignes-Rambourg and Co., at 24*l.* 8*s.* per ton; five reservoirs (plates), weighing about 6¼ tons, ordered by the Orleans Railway Company, at Joret, at 19*l.* 12*s.* per ton; and, finally, a quantity of conduit pipes, ordered by the Northern of France and Charentes Railway Companies, at 7*l.* 16*s.* and 7*l.* 14*s.* 4*d.* per ton. The French markets for iron show firmness, the demand continuing good. The Ferrières Works have resumed the manufacture of plates, in consequence of their having concluded a rather considerable contract with a Paris house. The works of the Nord are making large deliveries towards the West, and especially into the Sarthe. In the Champagne group rolled iron from charcoal-made pig is dealt in at 8*l.* 12*s.* to 9*l.* per ton, and coke-made ditto at 7*l.* 12*s.* per ton. Pig, however, does not appear to have yet participated in the revival of activity observed with regard to all other metallurgical products. The Société Anonyme des Chantiers et Ateliers de l'Ocean has just received an order for two small steamers for the Ottoman Government; the hulls and engines of these steamers will be executed in the Bordeaux establishments.

The state of Belgian metallurgical industry is considered to be improving from day to day. Current affairs, especially in merchants' iron, present themselves sufficiently freely to enable several establishments to re-light furnaces which have been inactive for some time past. This amelioration in affairs has a direct influence on prices, which are supported with great firmness; notwithstanding the advance recently announced, an attempt is even being made to further advance current rates to the extent of 4*s.* per ton. Sheets and special iron are not excluded from the movement observed in merchants' iron; the demand is abundant, and several of the works which produce these descriptions are provided with employment for several months to come. A partial improvement is also noticed at length in the Belgian pig-iron trade; some rather important transactions have taken place in refining pig, and have sensibly reduced the stocks which had accumulated in the blast-furnaces. A contract for 3000 tons is mentioned as having been concluded, at 2*l.* 12*s.* and 2*l.* 13*s.* per ton. There is no improvement to report in casting pig, the price of English pig rendering any advance in Belgian impossible; a contract has been accepted for No. 5, at 2*l.* 17*s.* 3*d.* per ton. The important contract for rails for Hungary, to which allusion was recently made under this head, will be followed, it is understood, by orders for plant for the same destination.

The Belgian coal trade has not experienced any important change of late; the demand continues to be well sustained, and it is stated that some coal owners of the Charleroi basin are about to attempt an advance in prices. Stocks begin to diminish; they are, however, important. Freights display a marked tendency upwards. The coal basin of the Sarre (Prussia) produced during the first eight months of this year 2,090,926 tons, against 2,065,529 tons in the corresponding period of 1867, showing an increase this year of about 25,000 tons. The sale during the first eight months of this year amounted to 2,051,945 tons, against 2,043,054 tons in the corresponding period of 1867. The deliveries by railway have somewhat fallen off, but there

has been an increase in the deliveries by canal. The deliveries to France show a decline, but there has been an increase in the deliveries to Germany and Switzerland. It appears that the production of the basin is disposed of as follows: 47 per cent. in France, 27 per cent. in Prussia, 21½ per cent. in the Zollverein, and 4½ per cent. in Switzerland.

ROYAL CORNWALL GEOLOGICAL SOCIETY.

The annual meeting of this society was held at Penzance, on Tuesday (Mr H. S. TREMENHEERE, President, in the chair), when an elaborate and interesting address, tracing the history and pointing out the utility of the society, now upwards of half a century old, was read, in which it was stated that the demand for the services of well-instructed geologists was increasing every year. They are in demand, first, for the geological surveys which, in imitation of our own, nearly every civilised country is making. In Russia, Prussia, Austria, France, Spain, Italy, Palestine, Egypt, the United States, in some of the South American States, in India, and in our colonies, geological surveys are being carried on, and young men properly qualified are obtaining salaries of 500*l*., 600*l*., 800*l*., and 1000*l*. a year. Between 30 and 40 were named to me as holding considerable appointments. The Jermyn-street staff itself consists, among others, of no less than 39 assistant geologists and 10 geologists employed on the geological survey of this kingdom, besides the several higher appointments. Secondly, they are in demand for private firms and public companies, in certain departments of business where it is found to their advantage to have attached to them a competent geologist who is also acquainted with chemistry or chemical analysis. Not many years ago young men possessing this kind of instruction were obtained from Germany, but the demand is now being supplied by our own country. Thirdly, they are wanted as teachers in various mining and scientific schools, the numbers of which are likely to increase rapidly, in obedience to the pressing call of the day for technical instruction. The sons, also, of that valuable class of men our mine captains are wanted in increased numbers to go through the course of instruction at the School of Mines. Many young men of that class have gone through the Jermyn-street course with success, and have found their reward in excellent appointments. Many of the present copper ores in Cornwall contain pyrites. This pyrites, if properly reduced, would greatly increase the produce of copper, and that in the class of mines much needing such aid—those where the ores are poor—it is not done; but on the Tyne, the Mersey, and the Dee, Spanish pyrites, containing only 1 or 2 per cent. of copper, is worked for copper at a good profit. The process is a chemical one, and is as available in Cornwall as on the Tyne, the Mersey, or the Dee. Again, Mr. Hunt states that much of the Cornish tin is contaminated with copper; this reduces the value of the metal. The Cornish precipitating processes (in action, for instance, in Carnon Valley) are very rude; the tin might be purified, and the copper saved. Is this anywhere done? It is done on the Tyne and the Dee, where the processes are very simple, neat, and effectual. Mr. Hunt adds that "when a spirit of enterprise re-awakens, and a new activity appears in our mine adventurers, it will be absolutely essential to secure the introduction of machinery to supplement manual labour, and often as a substitute for it. Cornwall can only be restored to a healthful condition, as far as her mines are concerned, by economising in every direction." Science is at the bottom of all such improvements. The report of the Council alluded to the fact of the society being localted in a suitable building. The debt of the society was still 1000*l*., and although, more especially owing to the liberality of a well known and constant friend of the institution, arrangements were in favourable progress towards the reduction and extinction of their pecuniary burden, still their financial position was such as, at all events for the present, to hamper the society's onward course, and to delay the full development of its usefulness, more particularly as a school both of scientific and economic geology. The Council trusted that a large accession of contributing ordinary members might be one consequence of the society's entry into its new building, and the greater facilities now afforded for the use of its museum and library.

Papers were afterwards read by Mr. Warington Smyth, F.R.S., with reference to certain copper ores at Belstone Consols; by Mr. Robert Hunt, on the three ordinary theories of the formation of mineral veins, and on the new theory of surface force; by Mr. Collins on tin streaming; and by various other members. The meeting passed off in a most satisfactory manner.

[ADVERTISEMENT.]

From Mr. EDWARD COOKE:—After the long depression that has existed in the Mining Market, it is gratifying to be enabled to report a decided reaction, with an active demand for shares in tin mines especially. A considerable rise in price has been the consequence. There are several mines, and I allude more particularly to those termed progressive mines, that still present a large margin for a rise. Having visited some of them very recently, I am in a position to speak with greater confidence of their respective merits. I commence with NORTH WHEAL CROFTY, which appears to be emerging out of the difficulties that have for a long time past depressed the value of the shares. The prospects for the future are now very good. The same may be said of the adjoining mine, EAST SETON. Surrounded as this mine is by some of the best copper and tin mines, the chances of East Seton becoming equally productive are very great, and the shares well worth looking after. Leaving the Camborne district, I will next allude to a few of the highly promising young mines in the celebrated tin districts of Wendron. Within an area of some two or three miles several millions sterling worth of tin has been returned by a few mines situated therein. Among the most productive of them may be noticed Great Wheal Vor, Trumpet Consols, Great Work, &c. Adjoining the latter celebrated mine is WEST GREAT WORK, which under very efficient management has been brought into a profitable state, notwithstanding the low price of tin prevailing during the last few years. No call has been required from the shareholders since 1866, and the accounts are well charged up and disbursed. SOUTH GREAT WORK adjoins the former mine, and is already returning tin sufficient to nearly meet the current costs. A cross-cut is being driven to intersect what is termed the Giant lode. A few years since a considerable amount of tin was raised from the back of this lode, almost from the surface, and sold in the stone, and was only abandoned on account of the water being too much to be kept out by manual labour. The water will now be drained by the level that is being driven from the shaft, now down some 20 fathoms. The intersection of this lode is an important point, and is expected to be productive. A few fathoms to the south is a known copper lode, which will be also intersected by a cross-cut. The shares are now selling at what I consider an extremely low price. At the next meeting a call of 6d. per share may, probably, be made; this, with the sale of tin, will, I believe, be sufficient to pay all costs. In the course of about two months the lode already mentioned is expected to be met with, which may obviate the necessity of any further calls. Altogether, South Great Work is one of the best and cheapest speculations in the whole list of mines. Adjoining Trumpet Consols is EAST TRUMPET MINE, which is already returning tin almost sufficient to pay the working costs, and indicates becoming, like Trumpet Consols, one of the best tin mines in this rich district. There are only 2000 shares, and 30s. per share has been called up; the price is now about 2*l*. to 2*l*. 10s. The shares in Trumpet Consols were the same price some two or three years since, and now they are 13*l*. to 14*l*., and paying 15 per cent. per annum in dividends. EAST TRUMPET CONSOLS, under the same management, will, in all probability, add another mine to the Dividend List.

Another highly promising progressive mine in this district is NEW WHEAL LOVELL, making returns of tin, I am advised, more than sufficient to meet the working costs, and will, in my opinion, be one of the mining prizes of 1869 to those who buy the shares at the present time. The mines I have mentioned are all eligible to invest in, as there is no fear of heavy calls, nor of the Stannaries Court, while they contain the elements requisite to make them safe and profitable. I now proceed to touch upon the mines in the celebrated Chiverton district. WEST CHIVERTON continues as productive for lead as ever. The lode has been intersected in the 120 fathom level, but up to the time I am writing I am not aware of its value. The late valuable discovery of lead in the adjoining mine—CHIVERTON—tended to give new life to the mining interests of Cornwall generally, but a damper has again been thrown on it by the rumour that this discovery is near the boundary of the sett, the particulars of which I will endeavour to give for the benefit of those not well acquainted with them, although interested in the result.

It will be remembered that a company styled MINERAL BOTTOM a few years since worked the ground adjoining the new shaft in Chiverton. After working some time it was abandoned, about 2½ years since. The engine was taken out of the house, and the latter, reverting to the lord of the soil, was actually taken down and sold by him. I mention these particulars to show that the company had to all intents and purposes given up all idea of re-working the property; and, as the ground was granted by the lessor in one lease in the first place with that now in possession of the Chiverton Company, it was generally supposed to have reverted to this company, or to the lessor. The latter coincided in this opinion, and considered Mineral Bottom ground as being added to Chiverton sett. It is stated, however, that the first lessee had sub-granted the portion of ground called Mineral Bottom; and, although the company had ceased working, the covenants in the lease had not been broken, nor had the lease been revoked by the lessor. Under these circumstances, and seeing that an important discovery has taken place near the boundary, the shareholders in the defunct company have been called together for the purpose, I suppose, of considering what steps shall be taken. The public will see the injustice of the case when they are told that both Chivertou and Mineral Bottom Mines were under the same manager; and I have reasons for saying that the manager, Capt. Juleff, entertained the opinion as recently as the 22d ult. that the whole of the late Mineral Bottom ground belonged to Chiverton Company; and, if through some legal technicality they are deprived of it, a gross piece of injustice will have been done them, as they have been allowed by those who ought to have known better to expend money in repairing damages, &c., done to ground now attempted to be taken from them. Upon the strict legality of this attempt I am not competent to offer an opinion; but upon the equity of the question I think there cannot be any difference of opinion among those acquainted with the particulars. Apart from the disputed ground, there are some 80 fms. upon the course of this rich lode, including the whole of the late discovery stated to be in Chiverton proper. This of itself makes it a valuable property, and the shares cheap at their present price as a speculation. A new shaft has, I believe, been commenced, and in a short time will be down on a rich course of lead, worth for the length of the shaft, 12 ft., upwards of 100*l*. per fathom.

DRAKE WALLS MINE will be very much benefited by the rise in the price of tin, which will enable the company to work at a profit, it is stated, of about 200*l*. to 300*l*. per month. The shares are now very cheap, and worth buying. The statement of accounts of FRANK MILLS MINE have been circulated previous to the meeting held on the 6th inst. It will be seen that about 900*l*. profit has been made during the past quarter. At the next meeting I presume dividends will be resumed. The mine continues to look well, and the shares cheap at present price. From the general appearance of the market I am of opinion that there will be a continuance of activity for a long time to come.

THE CORNISH MINE SHARE MARKET.—There has been a good demand in the Cornish Mine Share Market during the past week for nearly all progressive and dividend tin stock, and prices still exhibit an upward tendency. Copper stock, however, continues dull, although the market for that metal is reported to be slightly improved. Dealings during the week have been chiefly in the following mines:—West Frances advanced to 36, 37 buyers; Stray Park enquired for at 4; Tresavean firm at 5 to 6; South Crofty, 13½ buyers; St. Ives Consols, 7 to 8; South Condurrow, 15s. to 17s. 6d., rather freely dealt in at these prices; Trumpet Consols, 14 to 15; Tincroft scarce at 16; Cook's Kitchen buyers at 12¼ to 12½; Prince of Wales shares have fluctuated since last week between 46s., 42s., at which latter price they are now flat; Carn Brea firm at 20; Chiverton, 4; East Grenville weaker, 4 sellers; North Crofty in request at 27s. 6d to 30s.; Wheal Uny dealt in at 3¾; Emily Henrietta quiet at 27. West Seton quotations have advanced to 180, 190, but we can hear of no actual business; the 130 fm. level end is reported to be more productive. Great Wheal Vor, 13 to 14; Dolcoath still enquired for at 360. We call attention to the very sensible remarks expressed by Mr. Joseph at Pendeen Consols meeting. If mine shareholders generally would adopt such business-like views, and endeavour to carry them out, we should not have 120 mines in the Stannary Court now being wound up under the "Winding-up" Act.—*West Briton.*

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CHIVERTON.—The south end driving into the hill continues to improve, and is now worth 30*l*. per fathom. It is said this fine deposit of lead can be worked by virtue of the adjoining mines without machinery. The shareholders may confidently look forward to a profitable mine at an early day.

WEST PRINCE OF WALES.—Capt. W. C. Cock reports that the success of the undertaking, in his opinion, depends on the deeper development of the lodes. He has no hesitation in saying that their chances of success are really good, if what he has suggested is consistently carried out. They have a 20-in. cylinder rotary steam-engine, with pumping and winding gear attached; and the capstans, shears, &c., are quite adequate to all requirements for a considerable time to come. They have sufficient pitwork on the mine for the sinking of the south engine-shaft to the 28 fm. level.

NORTH LEVANT.—It is gratifying to be enabled to state that the operations in this valuable sett are proceeding very satisfactorily, and it would appear that dividends cannot be far distant, seeing that they are raising a good quantity of tin, and the balance against the adventurers at the last account was very trifling. The profit on the last half year's workings was nearly 600*l*., and now that tin has risen 7*l*. per ton there seems little doubt that the shareholders are about to be repaid for their patience and outlay.

EAST WHEAL GRENVILLE continues to make the most satisfactory progress, and the 110, 95, and 55 fm. levels have considerably improved, whilst the 65 shows every indication of a bunch of ore not far distant. Various damaging rumours continue to be circulated with a view to depreciate the shares, which are so heavily "beared" that a considerable number sold for the last account have not yet been delivered. The shares have been largely bought for *bona fide* investment, and are likely to reach a high figure, particularly should the lode in the 45 (which will be intersected next week) prove good. Considerable stress has been laid by the "bears" upon the low quality of the ores just sold. It may be as well to state that the chief portion of the ore was raised from winzes and rises in the cross-conrse to open the ground between the 110 and 75, and the ore, therefore, is no criterion as to the future produce of the mine. That the prospects both in regard to quality and quantity of the ore for the future are all that could be desired is indisputable.

WHEAL CHIVERTON.—The north end was taken down to-day, and some splendid work was the result. Some of the stones of lead which came out of the lode was as much as a man could lift. Shareholders need not be afraid of the dispute, as, supposing the Mineral Bottom adventurers are successful, they have enough ground in Chiverton sett to produce as much money as the most greedy shareholders would desire.

PRINCESS OF WALES.—The shareholders of this mine will be pleased to hear that a splendid lode has during the last week been intersected in the engine-shaft; this being a north underlie will form a junction with the main lode at a depth of not exceeding 35 fms., where large quantities of ore may be expected. This mine is giving promise of great success at a very early period of operation.

NORTH TRESKERBY.—This mine has much improved during the past few days. The lode in the 130 end, east of Tresidder's shaft, has undergone a most decided and favourable change in its appearance and character, but not yet rich; it is at present worth 1½ ton of copper ore per fathom. The lode in the 120 end east is looking better, there being every indication that the hard bar of ground has been passed through, and that the course of ore gone nown in the 110 will soon be reached in the 120; the end is already yielding good stones of copper ore, and letting out a quantity of water. An important point is the extension of the shallow level into the additional ground recently acquired.

THE MINERAL INDUSTRIES OF THE RHINE.

From the enormous progress which has been made, especially during the past few years, in the development of the coal and iron trades of the Rhine Provinces and Westphalia, the latest information given in the consular reports will be particularly interesting. The coal industry flourishes chiefly in the valleys of the Ruhr and Saar, but is also carried on to some extent in the districts around Aix-la-Chapelle, Bonn, and Minden. The collieries on the Saar seem favourably situated to supply the wants of the district itself in producing iron and other metals, and in feeding the factories of South Germany. But the neighbourhood of the frontier, and the demand which the French export trade creates, have already convinced the South Germans of the necessity for opening up communication with more distant coal fields, and hence a growing competition on the part of Saxony and the lower Rhine with the collieries of the Saar. The yield of the Saar collieries has not in any year exceeded about 3,500,000 British tons, whereas in 1865 the yield of the Ruhr collieries was nearly 19,000,000 tons. The Rhur collieries feed the great industrial centres of the Lower Rhenish provinces. They compete with England in the Dutch and the North German markets. Their produce goes up the Rhine, and has begun to find a sale not only in Belgium but in France. Not content with the railway routes to Rotterdam and Amsterdam, the coalowners are striving for new communication to the westward, and hope that, when the line is finished between Venloo and Herzogenbusch, and between Bergen-op-Zoom and Flushing, they will gain a share of the great English business. There is no doubt that if they could rival England in the quality, as well as in the price, of coal they might push us hard enough in certain quarters. They admit, however, that English sea coal is too superior to be forced aside by Rhenish; but they may, and perhaps do, calculate on the possible exhaustion of the coal fields of Great Britain. It would be of little interest to describe minutely the vicissitudes of the coal trade in the districts of Aix-la-Chapelle, Bonn, and Minden, districts in which the collieries hardly supply the wants of the localities in which they are worked. The basin of the Ruhr has higher claims to attention, because its existence and the activity with which its mineral treasures are worked are mainly the cause of the expansion of manufacturing enterprise in the adjoining parts of Germany. The coal fields of the Ruhr extend over a surface of 115 square miles, and are supposed to contain about 40,000,000,000 tons of fuel. They are comprised chiefly in the Government districts of Duisburg, Essen, Bochum, Dortmund, and Hamm. The rapid increase of their production may be judged of from the fact that in 1855 they produced 3,252,223 British tons, and gave employment to 22,235 hands, from which time there was a gradual increase until, in 1866, they produced 8,583,362 tons, and gave employment to 37,686 hands.

Taking British weights and measures, the price of coal was, on the average, during the three years ending 1866 about 5s. 6d. per ton; the wages in the coal districts varying from 13d. per day for boys and 2s. to 2s. 6d. per day for men for ten hours. Those who earn more do so by extra exertion in the mines where piecework is usual. The carriage of coal on railways averages four-tenths of one penny per ton per mile. A network of railways unites the collieries with all the great towns of the neighbourhood; a steam ferry takes the coal over the Rhine at Ruhrort to the silk and cotton factories of Crefeld, Vierson, and Gladbach; and there is a good harbour at Ruhrort, from whence the coal is towed up to Mayence and Manheim in barges. At Duisburg shipments are made from the quays of the Rhine. Fresh outlets for produce, and unexpected channels of enterprise, are discovered yearly. New railways increase the export of produce, and the carriages which take coal to distant provinces return laden with raw material for manufactures that can only live where fuel is plentiful and cheap. One can see that the expansion of the coal trade has been proportioned to the extension of railway communication; and experience shows us here that the progress of old towns, as well as the growth of new ones, is dependent on the same law. Dortmund and Essen were free imperial towns of old; the traveller may see the ruins of their feudal walls and towers in the midst of gardens surrounding modern houses, overlooked by hundreds of tall chimneys. Oberhausen was a wild and all but solitary heath before it became a junction station. It is the centre of a district abounding in pits, smelting-furnaces, and foundries.

The political and military events of 1866 were not without influence on the welfare of the Ruhr collieries, and the re-establishment of peace did not restore the railways to their normal capacity for carrying coal, and the traffic tables of the Köln-Minden, Bergisch-Markisch, and Rheinische lines, between July and December, 1866, show that the business in that department remained small, as compared with that of the first months of the year. Still the year shows an increase, though slight, upon 1865 in the production of coals, owing to a more general use of machinery as a substitute for manual labour; and none of the outlets opened in 1865 were absolutely closed. It is by comparing the latter year with 1864 that we appreciate feelings of exultation which find their expression in the conversation as well as in the written communications of the Ruhr coalowners. Railway returns prove, in addition, that the area over which the export of Ruhr coal takes place has extended every year. During 1865 and 1866 Westphalian coal was carried with profit to the Belgian coal basins of Charleroi and Mons, and even over the frontier into France. The beginning thus made by the Ruhr coalowners may be but the prelude to a larger business. It is a small matter at present, but the chances are favourable, if France cannot work her own fields so as to get more out of them, and England or Belgium are unable to deliver cheaper and in larger quantities. Under these circumstances, it is not surprising that great interest should be felt in the mining office of Dortmund, which superintends the collieries now under notice, as to the competition of the lines from the Rhine to the Belgian and Dutch coasts, as to the embankment of the Oster Scheldt, and as to the navigation of the Wester Scheldt and Sloe. As for the coal mines themselves, there are none that exceed 150 fms. in depth; some have double, most have but one shaft, divided by boardings into halves for the passage of air and the working of the cars. Substantial buildings cover the shafts, and contain the necessary steam-engines and boilers. The seams are numerous, and are worked at various levels from the same shaft. Some seams are as thin as 2½ ft.; the thickest are rarely above 4½ ft. The quality of the coal is various. Of great advantage to the district is the fact that bricks are made on the spot, of very good materials and at cheap price.

The most important ironstone fields are those about Siegen, Wetzler, Nassau, Daaden, Essen, Duren, Schlerden, and Aix-la-Chapelle. These fields are under the supervision of the two great Government mining offices of Bonn and Dortmund. In 1863 there were 661 mines, which produced 20,130,486 centners of ore, and employed 11,194 workmen; and in 1864 there were 939 mines, which produced 21,418,508 centners of ore, and employed 12,062 workmen; but in 1865 the yield of iron in the Rhenish provinces and Westphalia amounted to 11,399,426 centners (569,971 British tons), a quantity altogether insufficient for the consumption of the country, and necessarily supplemented by an import of 91,339 tons of Scotch pig. The superior yield of Scotland, as compared with that of the fields under notice, is stated to be caused by the greater capacity of the Scotch furnaces to produce quantity. It is a peculiar feature in the smelting business that the Germans never work except to order. They have fixed periods for sending round their travellers, and light one, two, or more furnaces, according to the quantity ordered. On an average, where three fires were alight in 1865, but two were kept up in the latter half of 1866. The greater part of the produce of the furnaces is now made with coke, whereas coal and wood were in common use previous to 1855, and it may be noted that in proportion as the furnaces are nearer to the coal fields their size and perfection are greater, and their capacity for smelting large quantities is increased. Important in an extreme measure is the advance in the quantity and quality of raw steel—iron as it is called—a species of metal which finds its way to England, Belgium, and France, chiefly for the purpose of transformation into steel by Bessemer's process, and which is used with success in such great works as KRUPP'S, in Essen, and the foundries of Hoerde. The quantity of raw steel-iron made was 155,353 centners in 1862, 399,946 centners in 1863, and 605,578 centners in 1864.

In some parts of the Rhine country and Westphalia coal and iron are found in proximity—near Aix-la-Chapelle, for instance, at Hoerde, Dortmund, Essen, and other parts of the Ruhr district; but in no case is the iron sufficiently plenteous, or of sufficiently good quality, to allow of its exclusive use. It is characteristic of the iron trade generally that the question arose, shall the coal be taken to the iron, or *vice versa?* And in most instances the iron has been brought to the coal. After the openings and extensions of many railways in these countries, and subsequent to the time when the extraction of coal assumed great proportions, the speculative capital of Germany was thrown with eargerness into companies formed for the purpose of puddling, sweating, rolling, and hammering iron and steel. Large establishments were founded, which at first gave promise of excellent returns; but these creations of a redundant credit soon felt the effect of the crisis; and since 1857, which was a year of great catastrophes, a struggling and often unhealthy existence has marked all but a few well-situated and ably-directed undertakings. There are 22 companies in existence in Westphalia and the Lower Rhine country, whose capital in shares varies from half a million to three million of thalers, whose dividends oscillated, in 1864, between 0, 2, 3, and 13 per cent. There are many important private works besides, the largest and most interesting of which is KRUPP'S, in Essen, celebrated for the excellence of its steel articles, and known by more than one description in Germany as well as in England. The mills produce iron and steel of all kinds—bars, blocks, plates, rails, wire, and the best boilers, wheels, and heavy hardwares generally; but the finer works of the engineer are not attempted, being left to the BORSIGS and EGELLS, of Berlin, or their colleagues of Hanover and Brunswick. KRUPP'S may but none of the lesser works do, look out for the very newest improvements; and you do not find, for instance, that any attempt has been made to remedy the well-known inconvenience of passing pieces under rollers from one side only. The subjoined is an extract from the official table which Mr. CROWE gives of the produce of manufactured iron and steel in Rhineland and Westphalia for twelve years:—

	1852.	1858.	1864.
Bar-iron and rails ..... Centners	2,469,633	4,542,477	5,677,865
Iron plate	232,258	555,846	1,090,987
White iron plate	—	57,063	89,169
Wire	279,641	459,888	626,673
Raw steel	110,003	199,222	605,578
Cast steel	33,659	117,216	702,508
Refined steel	100,699	52,145	59,419

The value of the iron and steel produced is stated to have amounted to 6,771,860*l*. in 1862; about 7,112,306*l*. in 1863; and 8,435,794*l*. in 1864. The number of workmen employed in mills, puddling, and other works in the two great districts under notice in 1864 was 45,952, making up, with their families, a total of 137,771 souls. Mr. CROWE found no difficulty in ascertaining the present wages of labour in the iron trade. As regards miners, the wages are similar to those of the coal fields. As to ironworkers, the prices paid in the mill of Messrs. ARNETT and Co., of Dortmund (from which those paid in other works differ only very slightly) per day of 12 hours were—ordinary unskilled labour, 1s. 8½d. to 1s. 9½d. per diem; rail iron puddler, No. 1 (1s. 8½d. per 1000 lbs.), 4s. to 5s.; No. 2 (1s. 1d. per 1000 lbs.), 2s. 6d. to 3s.; No. 3, 1s. 9d. per diem; bar-iron—puddler, No. 1 (1s. 9½d. per 1000 lbs.), No. 2 (1s. 2½d. per 1000 lbs.), No. 3, 1s. 9d. per diem; steel—puddler, No. 1 (2s. 6d. per 1000 lbs.), No. 2 (1s. 4½d. per 1000 lbs.), No. 3, 1s. 9d. per diem; fine grain iron—puddler, No. 1 (2s. 2½d. per 1000 lbs.), No. 2 (1s. 3½d. per 1000 lbs.), No. 3, 1s. 9d. per diem; bar-iron—sweaters, No. 1 (8½d. per 1000 lbs.), No. 2 (6d. per 1000 lbs.) No. 3, 2s. per diem; rail iron—sweaters, No. 1 (2½d. per rail), No. 2 (2d. per rail), No. 3, 2s. per diem; rollers, 2s. 9½d. per diem; ditto fore, 2s. 3½d.; ditto back, 2s.; man at lever, 1s. 4½d.; and boys, 1s. 1d. per diem. The hours of labour in the mills are from 6 A.M. to 6 P.M., and from 6 P.M. to 6 A.M. respectively.

Last year opened for the iron trade with prospects such as it had not had for a considerable period. The days of financial speculation were over; orders overflowed, and in their prosperity the masters were so insolent that they would not bind themselves beyond September. They repented of their presumption as war broke out. In spite of the withdrawal of 10 per cent. of the labourers by recruiting, they executed their orders, and then stood by. From the collapse of last autumn the trade is still suffering, so that Westphalian iron is not worth more *loco* than English finished iron under a similar condition. A considerable number of hands is at present at work, expecting better times. If is painful, indeed, to hear the complaints that are made. With the exception of rails, for which there are contracts delivered by South German companies, business is merely carried on to keep the best hands going.

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MESSRS. WATSON BROTHERS return their most sincere thanks for the great patronage bestowed and confidence reposed in their firm for 25 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services to all connected with mine or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

SATURDAY.—Good demand for Prince of Wales shares, at 43s. to 45s.; West Frances, 34 to 36; East Grenville, 3⅝ to 3¾; Seton, 50 to 52; West Seton, 180 to 190; Chiverton, 4 to 4⅛; Great Wheal Vor, 13½ to 14; Great Laxey, 20 to 21; Don Pedro, 3⅜ to 4; Yudanamutana, 2 to 2½; East Caradon, 4½ to 4⅝; Chiverton Moor, 6½ to 6¾; Wheal Grenville, 32s. 6d. to 35s.

MONDAY.—Market closed, and no list issued. [A report has been circulated on the outside market that the lode in Prince of Wales had improved to 80*l.* per fathom, and shares have been done at 45s. upon it. No notice of this improvement at the office, although there is a letter from the agent dated Saturday, and, therefore, it is not generally improved.]

TUESDAY.—Good demand for West Seton, Seton, Marke Valley, Don Pedro, and Great Laxey shares. Chiverton, Prince of Wales, Great Wheal Vor, and Drake Walls shares flatter. West Seton, 195 to 205; Seton, 50 to 52; Marke Valley, 8⅛ to 8¾; Don Pedro, 3¾ to 4; Great Laxey, 19½ to 20⅛; Chiverton, 3⅞ to 4⅛; Great Wheal Vor, 12½ to 13¼; Prince of Wales, 42s. to 44s.; Drake Walls, 16s. to 18s.; East Grenville, 4 to 4¼; West Frances, 34 to 36.

WEDNESDAY.—Market rather quiet to-day. Chiverton shares receded to 3¾, sellers, and Prince of Wales to 44s., sellers. Chiverton, 3½ to 3¾; Prince of Wales, 42s. to 44s.; Seton, 50 to 52; West Chiverton, 61 to 62; East Grenville, 4¼ to 4½; Great Wheal Vor, 13 to 14; Dolcoath, 300 to 320; Grenville, 32s. to 34s.; Drake Walls, 15s. to 17s.; Chontales, 2¼ to 2½; Yudanamutana, 2⅛ to 2⅜.

THURSDAY.—The market is very dull to-day. Prince of Wales, Chiverton, Drake Walls, and East Grenville flatter. West Seton and Herodsfoot in good demand. Prince of Wales, 39s. to 41s.; Chiverton, 3¾ to 4; Drake Walls, 15s. to 17s.; East Grenville, 4 to 4¼; Herodsfoot, 44 to 46; West Seton, 195 to 205; West Frances, 35 to 37½; Seton, 51 to 53; West Chiverton, 61 to 62; Wheal Crebor, 8s. to 10s.

FRIDAY.—Market very quiet. Chiverton, 4⅛ to 4¾; Redmoor, 2s. 6d. to 5s.; Herodsfoot, 45 to 50, in demand; Prince of Wales, 40s. to 42s.; Don Pedro, 3¾ to 4; West Frances, 35 to 37¼; Chontales, 2⅜ to 2⅝.

Mining Correspondence.

BRITISH MINES.

ABRAHAM CONSOLS.—J. Vivian, Nov. 5: The lode in the 27, driving east of shaft, is 1 ft. 6 in. wide, all saving work for tin; the lode in the same level, west of shaft, is 1 ft. 6 in. wide, producing rich work for tin, and much water coming from the lode; ground hard.

BRYN GWIOG.—S. Harper, Nov. 8: The lode in the 85, west from Bramwell's shaft, is about 1 ft. wide, composed of clay, spar, and lead ore—saving work; at times we meet with fine deposits of lead ore, producing lumps of lead ore from ½ to ¾ cwt.; from present appearances we are driving over a good run of lead, and, in order to to prove this, as soon as we communicate this level with the 85, driving east from Adams's winze, we intend sinking Bramwell's shaft below this level. The lode in the 75, west of said shaft, is looking a shade better, having met with some cross-joints of spar, intermixed with a little lead, but not yet to value; it is also letting out a little water; from these indications I judge we are approaching a change for the better. The winze in the bottom of this level is sunk to the required depth, and we have commenced driving east and west from the bottom of the winze. The lode in the west end is about 1 ft. wide, producing good saving work for lead. The same may be applied to the east end, both opening out good tribute ground. At Lloyd's shaft, in the 60 yard level west, we have met with a cross-joint or lode at right angles; and, as our object is to find another south lode, which is known not to be far apart from the one we sunk the shaft on, we have commenced driving south on this cross lode, and in doing so we meet with fine lumps of solid lead up to ¾ cwt., imbedded in sand and clay; the ground is easy for progress. We consider our prospects at this point to be very cheering, as I am day by day expecting to meet with a good bunch of lead in this neighbourhood. Our tribute pitches continue much the same as for some time past. Our water for the engine is still easy.

BWADRAIN CONSOLS.—R. Northey, Oct. 30: The lode in the 45 is from 5 to 6 ft. wide, worth 1 ton of lead ore per fathom, and looking kindly for further improvement in value. The lode in the 35 is without change since I last reported. The rise in the back of the 45 is up about 8 fms; lode worth 1 ton per fathom. All the stopes are yielding their usual qualities of ore. All the machinery is working excellently, and we are going on as fast as possible towards another sampling.

BWLCH CONSOLS.—R. Northey, Oct. 31: The shaft sinking below the 70 is down about 3 fathoms; lode 2½ ft. wide, carrying a mixture of lead ore. The lode east in the 70 is 2 ft. wide, with a mixture of lead ore; this level will have to be driven about 15 fathoms further east to reach the ore gone down in the 60. The lode west in the 70 is 3 ft. wide, carrying good stones of ore; here we expect an improvement in a short time. The lode in the 60 is 3 ft. wide, worth 1¼ ton per fathom. The lode in the rise in the back of the 50 is 2½ ft. wide, worth 1 ton per fathom. The lode in the winze in the bottom of the 40, sinking to hole to the rise in the back of the 50, is worth 1½ ton per fathom. No change in the 30. All the stopes throughout the mine are equal in value as last reported; we have now a fully supply of water, and are as busy as we can possibly be in getting all the lead possible for the next sampling.

CAPE CORNWALL.—R. Pryor, F. Hosking, Nov. 4: The ground in the 100 cross-cut, driving north of engine-shaft, is just the same as when last reported on, but the branch referred to in our last report is dipping rapidly towards the lode, and is producing more mundic, with spots of yellow copper ore. In cutting into the south of the 100, east of shaft, we have met with more water, which induces us to think there is more of the lode in this direction. There is no particular change in the 70 cross-cut south.

CARADON CONSOLS.—S. Bennetts, Nov. 3: The gossan lode referred to in my last as having been cut in the 78 north is found to be from 2 to 2½ ft. wide, and of a very promising character. In addition to the gossan, &c., fluor-spar is now making its appearance, and the whole containing spots of black oxide of copper. The lode in the 78 west continues large, and spotted with ore throughout, very similar to that found near the ore ground in the level over. The men who were employed in the stope at the 68, are now employed in sinkink a winze below the 78.

CEFN BRWYNO.—James Paull, Nov. 4: The 92 east is without any change to notice since my last report. The same level west is in a large and promising lode, producing good stones of lead and blende. The 80 east yields a little ore, but not to value at present. The same level, west of engine-shaft, is in a large lode, and the part upon which we are driving is yielding 1 ton 5 cwts. of lead ore per fathom. The lode in the 56, or deep adit level east, is 3 feet wide, producing good stones of lead ore at times, and is of a very promising character. In the cross-cut north in the 20 there is no change of importance since my last report. We are meeting with strings of spar in the joints continually, which contain spots of lead ore. The different points throughout the mine are being pushed on vigorously, and good progress is being made.

CHANTICLEER.—W. Wasley, Nov. 5: Since my last report, in driving the 90 yard level west of shaft we cut into an old sump sunk down from the level above. The level is not driven west of the sump. I cannot say yet how far the sump has been sunk below the 90 yard level, but we are busily engaged clearing it, and hope in a few days to get to the bottom, when I shall get it communicated as soon as possible with the rise in the roof of the 110 yard level for ventilation, &c. The above rise being up 14 yards the air has got very dead. I have, therefore, suspended it, and put the men to sink in the bottom of the 110 yard level under the rise, where we have a good strong lode of clay and spar, producing some very fine lumps of ore, and looking very promising. One lot of ore brought 11*l.* 5*s.* per ton.

CHIVERTON MOOR.—J. Juleff, W. Bennets, Nov. 5: The 85 cross-cut is extended 14½ fms. south of the engine-shaft. In the 75, west of cross-cut, the lode is 2 ft. wide, and worth ½ ton of lead per fm., with a promising appearance. In the 75 east the lode is 2 ft. wide, composed of spar and flookan. In the 65 east the lode is small and unproductive. The stopes in the back of the 65 are worth ½ ton of lead each per fathom (two). At Clogg's shaft the men are making good progress in sinking, and down 26½ fms. from surface. We are getting on pretty well in the lead-dressing department.

CWM DARREN.—R. Clocker, Nov. 5: The engine-shaft sinking under the 10, in which we have now erected a tackle, &c., is down about 3 fathoms, in a large, and a very beautiful lode, which is orey throughout the whole width of the shaft; and in taking down the ground left in the sides we find the ore continues for a width of 8 ft. 6 in.; this is a very large, powerful lode, studded with branches and solid stones of ore for an unusual width, and from its appearance I should say it must lead down to an extraordinary mine. We are obliged to take on some hands to assort the ore, and make it ready for crushing and washing, as the stuff is accumulating so fast around the base of the shaft that we have not otherwise space for it on the surface.

CWM ERFIN.—Nov. 5: The lode in the 20, west of cross-cut, is 2 ft. wide, with small branches of ore disseminated throughout. The stope in the bottom of the 10 will produce from ¾ to 1 ton of ore per fathom. The stope in bottom of the deep adit produces 12 cwts. of ore per fathom. In the cross-cut north, in the deep adit level, some small branches of ore have been met with. The lode in the rise in back of the deep adit is ½ yard wide, and poor. The intermediate level, east of stope, in the deep adit level, is producing 15 cwts. of ore per fm. There are four stopes working in the back of this level, each producing 1¼ ton of ore per fathom. Also another stope in the back of the same level, producing 10 cwts. of ore per fathom. In Taylor's drift, east of the boundary, the lode is 20 in. wide, composed of killas, quartz, and spots of mundic. Two stopes in back of ditto are producing 1 ton of ore per fathom each. A new stope in back of William's level is producing 1 ton of ore per fathom. The winze in bottom of William's level is producing ½ ton of ore per fathom.

DEEP LEVEL.—Nov. 3: In re-opening Pant-y-Go shaft, below the 174 yard level, good progress is being made. The lode in the deep level west, on Pant-y-Go vein, is 18 inches wide, composed of spar, limestone, blende, and nice spots of lead ore. The lode in the deep level south-west, on deep level vein, is 12 inches wide, principally composed of spar. In the 204 west, on Pant-y-Go vein, the vein is 2 ft wide, producing some good stones of ore. In the 174 west, on Pant-y-Go vein, it is composed principally of clay. The lode in the pitch over the deep level is 2 feet wide, worth 12 cwts. of lead ore per fathom. Another pitch over this level is producing 12 cwts. of ore per fathom. There are two pitches working over the 174, where we are taking out old arches of ground. Two pitches over the 204 east are worth 1 ton of ore per fathom each. In the 174, west of Eyton's shaft, we have a pitch working under this level, in whole ground, and will prove the lode in advancing the 204 west. Also a pitch over the 174, west of Pant-y-Go shaft, in old workings, where we find some good stones of ore in the clay.

DUKE OF EDINBURGH.—C. F. Collom, Nov. 5: Since my last (Oct. 2) the 46 has been driven west through a disordered piece of ground, but is now through the western part of the cross-course, where we find the lode hove. We shall still continue this level in the same direction until we have cut the lode in the deep adit, where we are cross-cutting to ascertain what the heave is, in order to intersect the lode with as little angle in the level as possible; each of those points may be looked forward to as very great importance. The cross-course above alluded to is a continuation northward of one of the Tamar Valley lead lodes, which is large, composed of flookan, quartz, prian, fluor-spar, mundic, and silver-lead ore, having an easterly inclination of 18 inches in a fathom, with a capel on the footwall; a most promising lode for producing ore, and I have no doubt, if wrought on towards the great elvan course which traverses this sett, and which is of a congenial soft nature, highly remunerative returns of silver-lead ore could be made.

EAST DARREN.—Nov. 4: Taylor's Shaft: In the 116 east the lode is large, producing saving work for dressing. In the 104 east the lode has improved, yielding fully 1½ ton of ore per fathom. In the winze sinking below this level the lode produces 1½ ton of ore per fathom. In the 92 east the lode is 1 yard wide, yielding 1¼ ton per fathom. In the 92 west the lode is 1 yard wide, yielding small branches of ore, but not to value. In the 80 east the lode is 1½ yard wide, composed of clay-slate, carbonate of lime, and stones of copper and lead ore, but not to value. In the 68 east the lode is 2 feet wide, producing branches of lead ore, and promises improvement. We have seven pitches at work, yielding their usual quantity of ore. At Skinner's shaft the ground is favourable for sinking, and progressing favourably. At the new shaft at Blaencwm the wheel is in its place, launders and water-course completed, bob-rods and the lift fixed, and are now busy in fixing the drawing-machine in its place, and hope to get the shaft divided and shaft tackle up, and resume sinking in about nine or ten days from this date. At the cross-cut north at New Pool nothing has been done since last reported, the men being placed to remove stuff at the mouth of the cross-cut, north of embankment, to prove if there is any part of the lode gone in that direction, but nothing has been met with up to the present time. As soon as all the stuff is cleared that we may see the rock, and nothing be met with, we shall resume driving both cross-cuts again.

EAST PROVIDENCE.—J. Nancarrow, Wm. White, Nov. 2: There is an important change at Boorman's shaft. There is a large tinny lode coming in at the east end, and the ground about it looks better. We shall open on it as fast as possible, and expect to be able to report more fully next week. The ground in the 106 improves as we approach the Carbona. There is no change of importance in the 82 nor 70. The 50 improves as the lode becomes more settled, and is likely soon to be valuable. Some of the pitches are looking better, and our quantity of tin is increasing.

EAST SNAEFELL.—W. H. Rowe, Nov. 3: We are making good progress with the sinking of the shaft, and in about a fortnight we expect to be deep enough for a 35 fm. level. I was hoping we were getting clear of those beds of country spar, but another is now showing itself in the bottom, which, however, appears to be much thinner than the others, and we shall, therefore, be sooner getting through it. We are delayed a little in the 20 north, having to secure the soft, slide ground with timber. In the forehead the hanging-wall of the slide appears to be turning round towards the north. There is also a great deal of water coming from some sparry joints, which may possible prove to be the lode re-forming. I am anxious watching this part of our operations, and whether we discover a fresh run of ore or not in this direction, the further exploration of this ground I consider highly desirable. After a careful dialling I shall shortly be making, one result will be to show where we may expect the shoot of ore, gone down in the sole of the 20, in contact with this large slide. It is, at any rate, a feature of very great importance in connection with the eriving of the 35, and is sufficient of itself to inspire confidence in the ultimate success of the mine. The stope in the sole of the 15 is yielding very fair lead stuff, but I have decided on driving a few fathoms in the level of the 20 lodge, which is 7 fms. below the 15, in order to tap the water. I would have driven this before but for interfering with the sinking.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 31: Setting Report: The 120 to drive east from engine-shaft, by six men, at 15*l.* per fm.; this is for plat, &c.; we have about 16 fms. more to reach the point of the horse, and which we hope to do in (say) four months. The 110 east, by six men, at 2*l.* 15*s.* per fm., and 2*s.* 6*d.* in 1*l.*; lode 2 ft. wide, worth 2 tons of ore; there is pretty much rich grey ore in this lode, hence it is worth 16*l.* per fm.—a fine looking lode. The 95 east, by four men, at 3*l.* per fm., and 2*s.* 6*d.* in 1*l.*; lode opening tribute ground. The 85 east, by four men; here we have let a bargain to put in a stope from the cross-course or rise above the 95 to the eastern end of the winze sinking below the 75, 2 fms. deep, at 14*l.* 10*s.* per fm.; this will make the intermediate or 85 fm. level, and from which stope we calculate to break from 10 to 12 tons of copper ore. The 75 east, by four men, at 4*l.* per fm.; lode worth nearly 2 tons of copper ore per fathom; here we believe we shall have an improved lode shortly, as we feel convinced the lode is undergoing a change. The 65 east, by four men, at 6*l.* 10*s.* per fm., for 2 fms. extent; our reason for setting a short extent is that we are expecting easy ground, and, if so, more ore. The lode is 2½ ft. wide, of a strong and kindly appearance. The 55 east, by six men, at 2*l.* 15*s.* per fm., and 2*s.* 6*d.* in 1*l.*; lode 20 in. wide, and worth 2 tons of copper ore per fathom. The 45 cross-cut is within 2 fms. of reaching the lode. We have to-day let four pitches to 16 men, at an average tribute of 8*s.* in 1*l.*

— G. R. Odgers, W. Bennetts, Nov. 5: The lode in the 110 fathom level east is 2 ft. wide, and worth 2½ tons of good ore per fm.; in fact, we are meeting with rocks of grey ore; money value, from 16*l.* to 20*l.* per fm.; this is as fine a looking lode as any miner can look at, which makes the 120 fm. level a desirable object. The lode in the 95 fm. level east is 1 ft. wide, and it will produce 1 ton of ore per fathom; here we have met with some elvan (which was the case in the 110 before the lode began to improve), which leads us to expect similar results here. No lode has been taken down in the 85 east, as we have a stope of granite to put in first. The lode in the 75 east is split; this we think will not continue long; lode worth from 1 to 1½ ton per fm. The lode in the 65 east is changing, and we believe, after driving 6 ft., that we shall meet with a similar improvement to that in the 55. The lode in the 55 east is 20 in. to 2 ft. wide, a pretty lode, and worth from 2½ to 3 tons of ore per fm., in which we find mass copper and the green carbonate. We have about 7 ft. more to reach the lode in the 45, which will be done in another week at the furthest.

EAST WHEAL REETH.—T. Uren: Since my last report we have not got on so fast in clearing the adit level, having had bad ground and a good deal of water, but are now nearly through it, and have opened drains to take away the water, and expect shortly to see the adit end.

EAST WHEAL RUSSELL.—William Richards, Nov. 5: The stope in back of the 140 yields about the same quantity of ore per fathom as for some weeks past. The ground in the cross-cut south, towards the branches in the 130 east, is a mixture of stiff killas and elvan, with small branches of quartz and mundic. On commencing operations at the Tunnel we find the north lode has been driven on a little over 10 fms., but the level is so low and narrow that we are obliged to cut ahead, and to clear it of stuff the old miners deposited there. We find some stones of ore, mundic, &c., in the stuff, and the appearances here are very encouraging. We hope to commence driving in the course of next week, and we will push it on to the cross-course as soon as possible. We find a level has also been driven east on the course of the middle lode, but how far we cannot say now, because in consequence of the softness of the lode, &c., it has come away from the back, and filled up the level with stuff as far as we have gone—about 3 fms. In clearing out the stuff here we have found some stones of ore, mixed with peach, prian, and quartz. The indications are very promising, and I consider this to be an interesting part of your property. We shall sample, on Monday next, about 41 tons of ore, the produce of October month.

EBURY.—Wm. Kitto, Nov. 5: We have commenced to drive the 50 fm. level end west, and just struck into a large "lough." I can see lumps of lead in it, but will give you more particulars next week. Nothing new elsewhere.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., Oct. 31: Our sumpmen are progressing well in sinking King's engine-shaft below the 70, and the ground of a good description for the production of minerals. The new winze sinking below the 70, on the north side of the lode, is progressing as fast as the nature of the work will admit. No. 2 winze, sinking below the 70 east, on the course of the lode, is yielding 6 tons of good quality ore per fathom. The lode in the 70, east of said engine-shaft, is worth 3 tons of ore per fathom. The lode in the stope in back of this level is worth 5 tons of ore per fathom. There is no change in the appearance of the capels of the lode in the cross-cut, driving south from the 70 west. The lode in the 60, east of engine-shaft, is 6 ft. wide, yielding 1 ton of ore per fathom. The lode going down in the winze below the 60 is worth 5 tons of ore per fathom. Our last samplings of ore weighed off 103 tons 10 cwts.

GLASGOW CARADON.—W. Taylor, Nov. 3: Caunter Lode: The 78 west is at present driving by the side of the lode; we shall take it down next week; ground more favourable for driving. The stopes on this lode are just the same as last reported. The cross cut to the south lodes at this level we are pushing on by six men as fast as possible; ground a little more favourable.—Arrol's Lode: The 65 east is worth 5*l.* per fm. Stopes on this lode are worth from 6*l.* to 12*l.* per fathom. No change in the 52 cross-cut south.—Harvey's Lode: The 65 east is driving by the side of the lode in very easy ground. The 65 west is worth 6*l.* per fathom. The stopes on this lode continue to look very well, varying in value from 8*l.* to 15*l.* per fm. In addition to the tutwork settings I have set three tribute pitches to five men and two boys, at 10*s.*, 10*s.* 6*d.*, and 12*s.* 6*d.* in 1*l.*

GOGINAN.—Nov. 3: The lode in the rise over the 110 is 5 ft. wide, and worth 15 cwts. of lead ore per fathom. The lode in the winze sinking below the 100, east of rise, is 4 ft. wide, and yields 14 cwts. of lead ore per fathom. We expect to hole these points in a day or two, when we shall again resume the driving of the 100 and 110. The stopes over the 100, east of rise, are producing on an average 17 cwts. of lead ore per fathom. The lode in the stope over the drift, west of rise, is 4 ft. wide, and yields 11 cwts. of lead ore per fathom. The north lode at the 60 is without any change to notice, still producing good stones of ore. The tribute pitches in the old part of the mine continue to yield about 12 cwts. of ore per fathom.

GREAT GWMSYMLOG.—R. Clocker, Nov. 5: Since my last report our men have made fair progress in driving. The lode still continues very promising, and is yielding lead ore just as before reported.

GREAT LAXEY.—J. Barkell, Nov. 3: Owing to the great length of our levels the water in the engine-shaft is forking but very slowly, but we hope soon to resume the driving of the 210 north. Having cut into a cavity in the 200 fathom level end north, we have made good progress in driving during the last three week's; the lode in the end is still worth 70*l.* per fathom. There is no change to notice in the 190 fm. level end. We are not taking all the lode with us in the 180 fm. level end, as we want to push the end on to get far enough north to meet another sump to come down from the 165 for ventilation, the air in the latter level being very dead. The part of the lode we are now carrying in the 180 is worth 60*l.* per fathom; and the 160 fm. level end is worth 70*l.* per fathom. The lode in the 155 has improved a little, now worth 95*l.* per fathom. The lode in the 145 driving north is still keeping small, worth about 15*l.* per fathom. The air is not very good in this end, but we shall shortly ventilate it by a short cross-cut now being driven east from the west vein.—South Ground: We have recently holed a sump sunk below the 60 to a rise put up from the 90, and in consequence of this holing we shall put a couple of good stopes more to work next month, worth from 60*l.* to 70*l.* per fathom. There is no change to notice in the copper ground below the 165 south since last report.—Dumbell's: Since the new lift has been fixed at the 140, and the main rods brought down, we have eased and divided the shaft, put in penthouse, &c., and we are now ready to commence driving both north and south. I am glad to be able to report a very great improvement in the 125 fm. level end driving north. In our report for your half-y arly meeting, held three weeks ago, we reported this end to be worth 80*l.* per fathom; but, seeing that the lode in the winze sinking below the 110 (12 fms. in advance of the 125) was worth 150*l.* per fathom, we anticipated an early improvement; this anticipation is realised—the lode in the end is worth 150*l.* per fathom, and the sump above referred to is still worth 150*l.* per fathom. The lode in the 110 fm. level end driving north maintains its usual size (about 2½ feet wide), and is mixed throughout with lead and jack. The levels driving above the 110 are without much alteration. The 70 driving south is worth 40*l.* per fathom. The 60 driving south is not looking quite so well in the roof, but there is no change in the sole of the level; lode worth 50*l.* per fathom. The 60 driving north is worth 50*l.* per fathom. Our stopes and pitches throughout the mine are looking much as usual, and yielding about their usual quantity of ore.—Glenroy: I am sorry to inform you that we had a fatal accident here last week. One of the men was at the crab winch for the purpose of changing a bucket, and by some means or other he let the handle of the winch slip out of his hand; the winch ran backward, and the handle came back with great force, striking the poor man just above the forehead, killing him in a moment. He was about 31 years of age and unmarried. There is no change to notice in this part of the mine.

GREAT NORTH DOWNS.—William Rich, Nov. 4: Operations in the bottom of Sleggan's shaft have been suspended during the past few days, owing to the breaking of the connection caps and the main rod. We have, however, made this all right, and have pumped out the water from the bottom of the mine. The sinking below the 84 will be resumed forthwith. The 84, west of Sleggan's, carries stones of ore. The 84 east is worth 10*l.* per fathom. The winze in the 74 east is worth 10*l.* per fathom. We have the slide in this winze, about 4 fathoms below the 74. The 84, west of King's, carries good stones of ore, with a quantity of mundic, and the ground somewhat easier for driving; the lode looks very promising to improve. The bottom of the 74, west of Sleggan's, is worth 15*l.* per fathom. The stopes in this level, west of shaft, are worth 12*l.*, 12*l.*, and 8*l.* per fathom. Nothing of importance having been met with in the 64 fathom level cross-cut south, the men are, therefore, put to open out on the branch recently passed through, so as to prove it away from the influence of the cross-course. There is no material alteration in the composition of the lode in Butler's shaft, worth 5*l.* per fathom. The 75, east of Butler's, is worth 10*l.* per fathom. The stopes in the 64 east are worth 35*l.* per fathom in the aggregate. Our copper ore (computed 391 tons), weighed off 404 tons, realising 2051*l.* 3*s.* We shall sample the tinstone to-morrow.

GREAT NORTH LAXEY.—R. Rowe, Nov. 3: The engine-shaft is now sunk 12½ fms. below the 96; we intend to sink 9 feet more, in order to complete the proposed 110 fm. level, and then cross-cut east, as well as drive out north and south. The lode in the bottom of the shaft is at present 4 ft. wide, yielding a heavy feed of water and stones of lead. In the 96 fm. level end driving north the lode is 3 ft. wide, and worth 15 cwts of lead ore per fathom. The stopes in the roof of this level are worth 1 ton of lead per fathom. In the 84 fm. level end driving north we have driven through a "pipe" of ore, about 3 fms. long, and worth about ½ ton to the fathom, but the end at present is not so good; the lode is still 4 ft. wide, and letting out a great quantity of water. I am confident there is new ore ground before us yet to be discovered. In the 60 south the rise, now up 11 fms., is worth 15 cwts. to the fathom. Lately we resumed the driving of the 27 fathom level south to get over this ground, and I am very glad to state that the end is now opening out a very promising lode, containing a rib of lead worth ½ ton to the fathom; the ground is in whole here to the surface 50 fms. high; and if we are fortunate enough to meet with a further improvement in driving ahead, new and important resources of ore ground will be soon available. We sold on Friday last 45 tons of lead, to Messrs. Stock and Co., at 13*l.* 4*s.* 6*d.* per ton.

GREAT RETALLACK.—G. R. Odgers, J. Harris, Nov. 4: No. 1 Lode: The No. 1 shaft has been divided and cased from the 20 to the 30 fathom level since our last advice, and the men are now engaged bringing down a piece of ground for the plunger-pole; this they will complete by to-morrow, when they will commence about the plat, &c., before resuming the sinking below the 30. The lode in the 30 south is 2½ ft. wide, and worth 6 cwts. to the fathom. The lode in the 30 north is from 15 to 18 in. wide, producing good lead. The lode in the 20 south is from 1 ft. to 15 in. wide, of a kindly appearance. The lode in the 20 north is 18 in. wide, producing good stones of lead. The stopes are much the same as last reported.—No. 2 Lode: The lode in the 40, both north and south from the shaft, is from 18 in. to 2 ft. wide, composed of white iron and quartz, containing good stones of lead. From the features which the lode in the north end is presenting any person would look for an improvement. The lode in the 30 north is 2 ft. wide, consisting principally of gossan, which is letting out a lot of water. The lode in the winze sinking below the 20 has again improved; it will produce from 12 to 15 cwts. of lead per fathom, and we are hoping it will further improve by Saturday.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, Oct. 31: The lode in the 20 east is 2½ ft. wide, containing mundic, carbonate of lime, flookan, and spots of lead—a very promising end. The rise above the 40 is holed to the winze below the 30, and up to that point continued to yield ⅔ ton of lead per fathom, and we have drawn a splendid pile to surface. The mine is now well ventilated throughout, and we shall immediately resume the driving of the 40 west, and commence the driving of the 50 east on the north lode. The lode in the 40 east looks rather better. The 50 west is greatly improved in appearance, and is letting out more water; the lode is 3 ft. wide, and we are evidently getting into the lead ground, for we have a little lead, just as we had in the 40, 2 or 3 fms. before we got into the rich lode, and from all that can be seen we shall soon be into a rich lode here.

GREAT SOUTH TOLGUS.—J. Daw, Nov. 4: In Noel's shaft, sinking below the 150, we have cut a stream of water issuing from the north, and we have put the sumpmen to drive in that direction to see if any part of the lode is still standing north of the shaft. In the 150, east of Noel's shaft, the lode is small and unproductive. In the 140, east of Noel's shaft, the lode is 1 ft. wide, producing good stones of copper ore. In the 154, west of cross-cut, on the tin lode, the lode is 4 ft. wide, worth 14*l.* per fathom. In the 154, east of cross-cut, the lode is worth 10*l.* per fathom. The stopes are still producing good tinstuff.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, Oct. 31: The ground in the 75 end, on the tin lode, west of the cross-cut, at Hill Brothers engine-shaft, has improved a little during the last day or two for driving, and is more congenial for mineral, the lode being about 5 ft. wide, producing some good saving work. The ground in the 75, west of cross-cut, on the lead lode, has also improved during the past week for driving. The lode in the present end is about 3 ft. wide, producing spar, mundic, flookan, and stones of silver-lead. We expect from present appearances an improvement at this point shortly.

GWYDYR PARK.—W. Smyth, Nov. 3: The lode in the shaft at Gwyn Llifion is still small, and the water rather heavy; re-set to six men, at 18*l.* per fm., stent the month. In the Vucheslas adit end the lode is without change, but the end is favourable for driving; re-set to four men, at 90*s.* per fm., stent the month; they are to pay for drawing the stuff. I have taken the men from the Vucheslas end and put them to clear the stuff from the bottom of the shallow adit at Gwyn Llifion to the west of shaft, and to staunch the bottom of the level to keep up the surface water, which is going down by side of the launders.

HINGSTON DOWN CONSOLS.—James Richards, Nov. 5: In Bailey's engine shaft, sinking below the 140, the lode is 3½ ft. wide, composed of capel, mundic, quartz, peach, and a little ore. In the 100 fathom level, west of Bailey's engine-shaft, a strong solution of copper being observed coming from the north side of the drivage, it was thought advisable to cut into the lode, which has been done, and it proves to be composed of capel, mundic, peach, and a little black oxide of copper, and is promising. This work will be continued until the full width and character of the lode is ascertained. In the rise in the back of the 85, west of Bailey's shaft, the north part of the lode carried is more healthy, being composed of capel, mundic, more peach, and black oxide of copper. In the 85 fathom level, east of Morris's shaft, the lode is without change, still yielding good stones of ore. In the adit level south the ground is wet and troublesome, rendering the progress slow.

HOLMBUSH AND KELLY BRAY UNITED.—I. Dainty, T. Odgers, Oct. 31: In the 25 fm. level east end driving west the lode is 6 ft. wide, worth 20*l.* per fm.; driving at 3*l.* per fm. Griffin's stope in the back is worth 10*l.* per fm.; stoping at 2*l.* per fm. Ruse's stope in the back is worth 5*l.* per fm.; stoping at 48*s.* per fathom. The former workers drove by side of the lode, leaving a horse of killas 7 ft.; the lode is 2½ ft. wide, and will return 2 tons of mundic per fathom, with a little ore. The present month's raising is 60 tons of ore, with 40 tons of mundic. This discovery is certainly one of considerable importance to the neighbourhood, especially so at such a time of general depression in the mining world. During the last two years a number of hands have found employment on these mines. We believe this to be one of the best undertakings in the neighbourhood, in which belief we are borne out by the opinion of a number of practical and scientific men, who have visited the mines, whose opinions can be relied on. At present we are busily at work erecting a 70-in. engine on the mine.

IMPERIAL.—E. Pearse, Nov. 4: In the adit level we have commenced driving west on the lode lately intersected, which is producing a little lead ore, and looks promising for an improvement; set at 4*l.* per fathom. The winze sinking below the 10 is down 7 fms., and is producing some good work; re-set at 7*l.* 10*s.* per fathom, to hole to the 20. In the 20 west we are still in a soft lode, which is poor, but I expect we shall get into harder ground soon, when no doubt the lode will be productive; re-set at 3*l.* per fathom. I have not set the stope in the back of the 20 yet, as the men are clearing their last month's stuff. I shipped a parcel on Monday last, which weighed 20 tons.

MAUDLIN.—J. Tregay, Oct. 31: In deep adit east we have not yet seen the lode east of the cross-course; west of the cross-course the lode in the rise is producing 1½ ton of good copper ore per fathom. A part of this lode is gone down behind the level, which we purpose stripping down, and expect to find an orey lode in bottom of the level as well as in the back.

MINERA UNION.—Wm. T. Harris, Nov. 4: Low's Shaft: The lode in the 60 yard level north is 3 ft. wide, producing saving work for lead, and is very promising. The ground in the 40 cross-cut consists of black limestone and spar.

—Brabner's Shaft: The ground in the cross-cut at the 80 yard level continues congenial for lead, and small leaders are met with, as last reported. The pitch in the back of this level is worth 1 ton of lead per fathom.—Boundary Shaft: We have commenced driving the 60 yard level north towards Low's shaft; the ground is favourable for progress. The ground in the big cross-cut is the same as for some time past—limestone; satisfactory progress is being made.

NEW CROW HILL.—A. Kent, T. Trelease, Nov. 3: At sump-winze we are sinking with fair progress, considering the water we have to draw; we have been obliged to put an additional hand in each core to haul water and stuff. The lode at this place is about 18 in. wide, composed of flookan, mundic, prian, shale killas, &c., with a little lead interspersed through the flookan, and specks in the spar. Our pitches are looking just as they were last week.—Wheal Louisa: At the engine shaft we are sinking in the usual way, though there is a floor of hard ground in the shaft at present, which renders it rather spare for sinking. At the winze under the 60 we are stoping the ends of it; the lode here is producing moderate quality stamps work. The 60 end east is improved since last week; the lode at present is 4 feet wide, letting out more water, and producing nice stones of ore.

NEW GREAT CONSOLS.—Richard Pryor, Richard Trathen, Thos. Bennetts, Nov. 3: Ellis's engine shaftmen are busily engaged in fixing the plunger-lift in the 74, and have sent down the H and top door-pieces. We hope by Saturday next to complete fixing the bottom, after which we shall at once commence to rear up this lift to the 40. The tribute pitches, on the whole, are just the same as for some time past, from which we are still breaking large quantities of copper ores and mundic. Our machinery is in good condition, and working well.

NEW TRELEIGH.—S. Michell, Nov. 4: We have taken down the lode in the 78, west of new shaft, to-night, and I find it has improved since last taken down; it is now worth 2 tons of ore per fathom, and the lode opening wider towards the north side. No lode has been taken down in the eastern end at this level since the setting; it is, notwithstanding, 8 ft. long, and I intend taking it down to-morrow. I entertain a good opinion of this lode, and have no doubt, when proved, it will be found satisfactory; however, I will communicate again when completed. The lode in the shaft is without change; worth 3 tons of ore per fathom. The lode in the rise in back of the 70 is looking much better, now worth nearly 2 tons of ore per fathom, and every appearance of further improvement. There is nothing of importance in the other parts of the mine to notice.

NEW WESTMINSTER.—Wm. Kitto, Nov. 5: The cistern for the large drawing-lift is fixed, and a great deal of preparatory work done; and, all well, I hope to commence sending down the bottom to-morrow morning. The ground in the 70 fathom level end east is very much better, but the lode, or rather the part we have in the end, is just now only poor; this, however, will only be temporary. In the 60 fathom level end east we have a little water, and bits of lead, which leads us to hope we are getting through this piece of disturbed ground.

NEW WHEAL LOVELL.—C. Bawden, J. Priske, Nov. 5: There is no alteration in any of the underground operations since last report. We sold to-day 8 tons 11 cwts. 1 qr. of tin, at 60l. per ton, realising (less carriage, at 3s. 4d., 1l. 9s. 4d.) 515s. 4s. 4d., which leaves a profit on the month's working.

NEW WHEAL TOWAN.—R. Pryor, Nov. 4: The ground in the winze sinking below the adit level is just the same as when last reported on. We are compelled to abandon the rise in the back of the deep adit level, in consequence of the air, so the whole of the men are engaged in sinking the winze, which will soon be communicated.

NORTH DOWNS.—Francis Pryor, James Williams, Nov. 3: We are pushing on with the works named in our last report as fast as possible. The 40 and 50 fathom levels are looking a shade better. All the other places in the mine much the same as usual.

NORTH JANE.—James Rowe, Nov. 4: No particular change since the general meeting, except the 36, east from engine-shaft; in the last 2 ft. driven we have a good leader of tin down the end, and indications that the lode will improve.

NORTH RETALLACK.—G. R. Odgers, J. Harris, Nov. 4: The lode in the 20, north from the No. 1 boundary shaft, is 18 in. wide, composed of friable quartz, &c., containing good lumps of silver-lead ores, worth from 2 to 3 cwts. to the fathom, which has a very promising appearance.

NORTH TRESKERBY.—R. Pryor, T. Jenkin, Nov. 5: Tresidder's Shaft: The 140 fathom level end men, east of shaft, are engaged in cutting through the lode, so as to ascertain its size and value. The lode in the 130 end east has within the last day or two undergone a very favourable change in appearance and character; it is now 3½ ft. wide, and produces full 1½ ton of copper ore per fathom; and, judging from its appearance, we still think that good results will yet be met with at this point. The lode in the 120 end has also improved, and is now 2½ ft. wide, producing some rich copper ore; this end, which has been for a considerable time in the hard bar of ground, is nearing the orey ground driven through in the level above; the end is letting out a quantity of water, which is an indication of a further improvement. The lode in the winze sinking below this level is 2¼ ft. wide, and worth 2 tons of ore per fathom, with every appearance of a further improvement. The lode in the 110 end, east of shaft, is at this time a little disordered, and only at present producing stones of copper ore. The lode in the stopes in the back of this level is worth 4 tons of copper ore per fathom. All other places without change. We are glad to say our prospects are more cheering.

OKEL TOR.—J. Rodda, Nov. 5: The lode in the 80 east is large, and composed of capel, quartz, peach, and mundic, interspersed with ore; it is also softer than we have had it for the last 3 fathoms driving, and is looking very promising to improve. In this level west of the cross-cut the lode is 2 ft. wide, and consisting of peach, quartz, mundic, and ore, to the amount of 1½ ton per fathom; this end is being driven in a highly promising piece of ground, and will, no doubt, go on to lay open good ground for stopes. Since holing the winze we have commenced to stope the back of the 80, where the lode will yield fully 3 tons of ore per fathom. The stope in the bottom of the 65, west of the eastern winze, will yield 4 tons of ore per fathom. The lode in the 65, east of Gerry's cross-cut, is large, and producing occasional stones of ore, but not to value. In this level, west of the cross-cut, we have a very fine-looking lode, producing from 3 to 4 tons of ore per fathom, with good indications for further improvement; this is an important point, going back towards the shaft, and behind the former workings. The tribute department is without change.

PENHALE WHEAL VOR.—Wm. H. Martin, Nov. 4: At our pay on Friday last the following bargains were set:—The engine-shaft to sink to the 104, by nine men, at 17l. per fathom; at present the men are engaged fixing the drawing-lift, which will be complete this week, after which no time will be delayed in sinking to the 104. A cross-cut to drive north from the 94, by four men, at 7l. per fathom, to cut the north Parkwarrah lode; also a cross-cut to drive south in this level to intersect the south lode, by four men, at 6l. per fathom. There is no change to remark on either of these ends.—Penhale Lode: Ritchie's shaft to sink to the 70, by nine men, at 12l. per fathom; the lode is 1 foot wide, composed of prian, mundic, and blende, and intermixed with tin. We hope now to have no further delay until we reach the 70. The 60 to drive west, by four men, at 7l. 10s. per fathom; the lode is 15 in. wide, and producing saving work for the stamps. Also set five tribute pitches at 13s. 4d., and one at 10s. in 1l. We have sufficient pitwork on the mine to complete the 10 fms. in both the engine and Ritchie's shaft.

PENHALE UNITED.—R. Pryor, H. Bennetts, J. Pryor, Nov. 4: We set the following bargains on Friday last:—Phillips's engine-shaft to sink below the 90, by nine men, at 20l. per fathom; lode 2 feet wide, producing saving work for lead. We have to sink this shaft about 6 feet deeper before we fix the plunger-lift. The 90 to drive north of shaft, by four men, at 3l. 5s. per fathom; lode 2 feet wide, and worth 3 cwts. of lead per fathom. The rise in back of this level, by four men, at 2l. 2s. per fathom; lode 2½ feet wide, and worth 5 cwts. of lead per fathom. This rise is being pushed on with all possible speed, in order to communicate with the levels above, and when accomplished will lay open a good piece of tribute ground, and give good ventilation to the bottom part of the mine. The 80 to clear and secure north of Hall's shaft, by six men, at 12s. per fathom; this level is cleared and secured 35 fathoms from the shaft, but is still quite full of stuff, all of which will pay well for dressing, and we hope shortly to reach the present end. We also set our usual number of tribute pitches, at tributes varying from 7l. to 7l. 10s. per ton. As soon as the 80, north of Hall's shaft, is cleared to the end we shall be able to set a great many more tribute pitches. The pay and setting went off very satisfactorily.

PERRAN SILVER-LEAD.—Matthew Wasley, Nov. 3: We have taken down part of the lode further south on the hanging-wall, east side, and find precisely the same promising appearances throughout for a length of 15 fathoms. I expect to decide this week on the most convenient spot to commence sinking the engine-shaft.

PRINCE OF WALES.—J. Gifford, W. Gifford, Nov. 5: On Saturday the following bargains were set:—To drive the 65 east by six men, stent 2 fms., by the side of the lode, at 7l. per fathom. At present we are taking down the lode; so far as seen it is worth 25l. per fathom. To drive the 65 west by six men, stent 2 fms., by the side of the lode, at 7l. per fathom; here we are taking down the lode, and have met with a vugh; at present the lode is not so valuable, now worth 10l. per fathom; but this we think is only temporary. We have fully 6 feet in length of lode to take down, and which we think will resume its former value. To drive the 55 east by four men, to carry all the lode, stent 2 fms., at 50s. per fathom. To sink a winze in the 55 east by nine men, stent 2 fms., at 8l. per fathom; lode 2 ft. wide, worth 5l. per fathom. We have every reason to believe this winze is south of our drivage in the 65 east. The stope in the back of the 55 east by two men, at 2l. per fathom; the lode is worth 30l. per fathom. To drive the 55 west by four men, stent 3 fms., at 4l. 5s. per fathom; the lode is 2 ft. wide, yielding saving work. To drive east in the 55 fm. level cross-cut by four men, stent 2 fms., at 4l. per fathom; here there is no change. The stope in the back of the 55 west by four men, at 55s. per fathom; lode worth 18l. per fathom. Another stope in back of the 56 west by four men, at 65s. per fathom; lode worth 12l. per fathom. To drive south in the 45 west by two men, stent 2 fms., at 3l. per fathom. To drive west on the supposed new south lode in the 45 west by four men, stent 1 fm., at 7l. per fathom; lode worth 15l. per fathom. A stope in back of the 45 west by four men, stent 4 fms., to carry the two lodes, at 60s. per fathom; the two lodes are worth 15l. per fathom each. To tram, fill, and land all the stuff for one month, by six men, at 22l. per fathom. A pitch in back of the 45 east by two men, for two months, at 12s. 6d. per produce, and 6s. 8d. in 1l. The new south lode in the 50 fm. level cross-cut is 1 ft. wide, composed of capel, quartz, and mundic, with spots of lead and copper intermixed.

PRINCESS OF WALES.—T. Foote, G. Rickard, Nov. 4: Since our last report, in sinking the engine-shaft we have intersected a lode about 3 ft. wide, underlying north towards the main lode, composed of capel, gosan, friable spar, and prian, spotted with mundic; this we regard as an important feature for the future development of this mine. We have an increase of water coming up from the bottom of the shaft, inasmuch that we fear we shall be obliged to suspend sinking before the engine is set to work. The engineers are making preparations for putting in the engine, and everything in connection therewith will have our best attention in getting it to work as early as possible. All the other work on the mine is in a forward state.

ROARING WATER.—Captain Thomas, Nov. 3: In driving west from north cross-cut the lode is much larger, and of the most promising character, composed of gossan, prian, and patches of rich grey ore; from appearances I think we shall meet a good run of orey ground in approaching the great caunter. The caunter lode, driving south-west of south cross-cut, is 4 ft. wide, mixed up with spar and flookan, and spotted with yellow copper ore—a kindly lode, and ground easy. In the south cross-cut end we are in a beautiful capel, elvan, and spar, mixed with strong yellow ore, and streams of water flowing from the end, so so much so that it is very difficult to make much progress. I really believe a powerful lode is near, and every effort is being made to reach it. I consider our prospects for the future are good.

ROSEWALL HILL AND RANSOM UNITED.—R. F. Treweeke, Sam. Uren, Nov. 5: In the 90, east of Ransom shaft, on the carbona course, since the general meeting, held in September last, we have driven the cross-cut west to intersect a part of the carbona which we thought to be standing in that direction, but finding it to be of little or no value we have suspended the driving of it for the present, but a more promising part we think has turned to the left hand, some few fathoms behind this cross-cut, which we shall shortly prove, and hope to be able to report favourably. In stoping the ground north and south of the winze communicated from this level to the 100 we find the lode to be large, of fair quality, and worth 30l. per fathom. The lode in the stopes further north, in the bottom of the said level, is worth 15l. per fathom. The lode in the 100, on the same course, is at present poor, but we believe a part of the lode to be still left in the footwall side, which we purpose opening on, and proving the same. The lode in the stope behind the end, in the back of the said level, is worth 30l. per fathom. In the 110, in the same direction, within the last week or ten days we have overtaken the dip of ore ground which is proving so rich in the levels above—the 90 and 100 fm. levels; the lode at present is 3 ft. wide, and we estimate it to be worth from 20l. to 25l. per fathom. This we consider to be an important improvement. We have resumed the driving of the 120 east, on the Standard lode, by six men, which we shall push on with all possible dispatch; the lode at present is small and poor, but we are of opinion that we shall overtake ore ground ere long. The lode in the 60 fm. level carbona, east of Ransom, still maintains its direction, and of late has shown symptoms of improvement, now worth 35l. per fathom. The 100 fm. level end, on the Standard, is still in broken and disordered ground; the lode is from 2 to 3 ft. wide, of a low quality: the cross-course has not yet been met with. We have recently resumed the driving of the 90, on the Standard, which is about 14 or 16 fathoms behind the 100 fm. level end; the lode is from 1 foot to 18 in. wide, saving work, and ground rather spare for driving, but when driven a few fathoms further east we expect better ground, when we shall sink a winze to communicate to the 100 for ventilation, &c., and which when effected will also open tribute ground.—Engine-Shaft: Operations in this part of the mine are now confined to a few tributers, on high tribute. The western part of the mine is still working on tribute, four pitches being worked by thirteen men and boys, at 12s. in 1l., present price of tin. We have 92 men and boys employed underground, 41 on tutwork and 51 on tribute, at an average tribute of 10s. 9d. in 1l. We have sold since the last account 26½ tons of black tin.

ROSECLIFF AND TOLCARNE.—R. Pryor, Nov. 4: The lode in the 50 fathom level, driving east of Lindo's shaft, is improving in its appearance and character, and is now 2½ ft. wide, producing rich stones of silver-lead. There is no lode as yet intersected in the 30 cross-cut, north of this shaft, but a favourable change has taken place in the ground.

SORTRIDGE CONSOLS.—R. Jackson, Nov. 5: In the 152, east of the engine-shaft, the lode is 2½ ft. wide, composed of spar, prian, mundic, and good stones of copper ore. There is no change to notice in any ather part of the mine.

SOUTH CONDURROW.—J. Vivian and Son, Wm. Williams, Oct. 31: In the 93, east of King's shaft, we have intersected the cross-course, and driven 3 fms. south on the same, without having yet intersected the tin course. In the 82, cross-cut south, west of King's shaft, we have driven 10 ft., and are entering the north branches of the tin course. In the 72 cross-cut south, west of King's shaft, the last 5 ft. driven have been getting into a better part of the tin course, and the chlorite matrix through which we are passing is thickly traversed by branches of almost solid tin, varying from 1 in. to 2 in. in width, but we have not yet got into the heart of the lode, and the highly favourable appearances already met with indicate in our opinion that the lode will be found to be of greater value at this level than at the level above, and that we are now only opening through the upper part of one of the largest bodies of tin which have ever yet been discovered in Cornwall. In the 61, west of King's shaft, we are opening out the tin course by driving east and west on it, and stoping the back. We find as far as we have yet proceeded that the lode is 18 ft. wide, yields tinstone worth 25s. per ton, which can be broken and dressed for 10s. per ton. Immense quantities of tinstone can be broken from this lode as soon as it is laid fairly open. We are driving a cross-cut south at the 51, west of Vivian's shaft, and are in 9 ft., but have not yet met with any lode. In the 20, east of engine-shaft cross-cut, on middle lode, the lode is small, but yields tin enough to pay for driving the level. The newly-acquired 20 head stamping-mill has been put into good order, and is at work, and we calculate now working at a profit.

SOUTH DARREN.—John Boundy, W. H. Boundy, Oct. 31: Setting Report: The 70 to drive west by six men, at 9l. 15s. per fathom; the lode in the end is 2 ft. wide, containing a little lead and copper, but not enough to value, although the indications are good, and of a kindly appearance. The drawing-shaft, sinking below the 60, measured to-day 9 fms.; we hope to communicate this with the 70 in about three weeks from this date. The 60 to drive west by six men, at 8l. 15s. per fathom; the lode in the end at present is disordered by a cross-course which we have recently passed through. Here we wish to remark that we have passed through the same cross-course in the same levels above. However, we are glad to say we are getting into a better stratum of ground, and, from its appearance, we anticipate early improvement. To stope the back over the 60 west by eight men, at 80s. per fathom; the lode is 3 ft. wide, worth for lead and copper ore 17l. per fathom. To stope the back over the 60, east from ditto, by six men, at 80s. per fathom; the lode is 2½ ft. wide, worth for lead and copper 13l. per fathom. The 50 to drive west by six men, at 8l. 10s. per fathom; the lode is 2 ft. wide, containing spots of lead and copper, of a promising character. To stope the back over the 50, west from the winze, by six men, at 85s. per fm.; the lode is 2 ft. wide, worth for lead and copper 15l. per fathom. To stope the back over the 50, east from the winze, by four men, at 80s. per fathom; the lode is 2½ ft. wide, worth for lead and copper 12l. per fathom. To stope the back over the 40 west by four men, at 75s. per fathom; the lode is 2 ft. wide, worth for lead and copper 10l. per fathom. To stope the back over the 30 west by two men, at 75s. per fathom; the lode is 18 inches wide, worth for lead and copper 9l. per fathom. The shallow level to drive east by two men, at 5l. per fathom; the lode is still small, and poor for mineral. The dressing, &c., as usual.

SOUTH GREAT WORK.—S. J. Reed, E. Chegwin, Nov. 4: In the 17, west from Boase's shaft, the lode is of a good size, and promising, worth for tin 7l. per fathom. In the rise recently begun the lode is 1½ ft. wide, worth 4l. per fm., and improving. Ground favourable in the cross-cut south towards Wheal Giant and copper lodes.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 31: The engine-shaft is sunk 10 fms. 2 ft. below the 30; there being more water coming from the bottom of the shaft, and finding more yellow ore in the branches, has led us to sink the shaft another month, which we have let to nine men, at 50l. per fm. We certainly like the elvan better, and we hope within the next month that we may meet with a change to justify our sinking.

ST. JUST AMALGAMATED.—R. Pryor, R. Wearne, Wm. Wearne, Nov. 4: The lode in Phillips's engine-shaft, sinking below the 50, is without change to notice since our last report. The lode in Saveall's engine-shaft, sinking below the 100, is worth 10l. per fathom. The lode in the 100, driving east of shaft, is worth 4l. per fathom. In this level, driving west of shaft, the lode is worth 4l. per fathom. The lode in the 90, driving west, is worth 5l. per fathom.—Owl Lode: The lode in the 40, driving north of Reddipper shaft, is worth 4l. per fm., and promising an improvement. The lode in the 20, driving north of shaft, is worth 6l. per fathom. The lode in the 10, driving north on the branch, is worth 8l. per fathom. The lode in the winze sinking below the adit is worth 8l. per fathom. The 62, driving west on Pryor's lode, is worth 7l. per fathom. No change to notice in any other bargain. Saturday next being our pay and setting, a full report shall be be sent you.

SUMMER HILL.—W. Wasley, Nov. 5: We shall finish cutting the lodge and commence to sink Wynne's shaft again to-morrow. I have let the south-west level at Hale's shaft to drive towards Wynne's shaft, at 22s. 6d. per yard. I am glad to say that the ground in the end is easier for driving, and the plat looking very promising. I have let the level on the new ore course to drive for this month, at 17s. 6d per yard, the men to fill and land all the stuff, pay for drawing, candles, &c., as usual. The plat in the end is looking very promising, but is not producing any ore at present. We shall have 8 tons of good quality ore ready for sale next Thursday.

TAMAR VALLEY SILVER-LEAD.—John Goldsworthy, Nov. 5: We are progressing with fixing the plunger-lift in the 27, and also the dropping of the pumps to the 47. We shall soon be ready to commence cross-cutting to the Tamar Valley lode. Nearly all our surface operations are completed.

VIGRA AND CLOGAU.—W. J. Holman, Nov. 5: The lode in the stope east from No. 6 shaft is 6 feet wide, and producing quartz of average quality. From the western end of the same shaft the men are driving a level forward towards the No. 1 end; the lode is 6 ft. wide. The lode in the No. 1 end, east from No. 1 shaft, is 4 feet wide, and just now is rather disordered and poor. The men from the stope in the bottom of No. 5 level have been engaged during the past week in winding water from the No. 5 shaft. At the old Clogau Copper Mine, the winding of water with the steam-engine is taking up a great deal of time. The miners are still blasting dead rock in the bottom of incline skip-shaft. In the Jenny's adit, at Vigra Mine, no change has taken place since last report. At the reduction works, 16 heads of stamps have been at work daily during the past week.

WEST BASSET.—G. Lightly, Nov. 4: Grenville's shaft: In the 164 east the lode is small and unproductive. In the 164 west the lode contains stones of ore. In the 154 east the lode is 4 feet wide, yielding 1 ton of ore per fathom. In the 144 east the cross-course has recently been met with, and the lode is, consequently, in a disordered state. In the rise in back of the 144 west the lode is yielding 2 tons of ore per fathom.—Middle Lode: In the 65 west the lode continues worth about 7l. per fathom for tin; in the bottom of this level a winze is being sunk in which the lode is about 2 ft. wide, containing tin. In the 75 west the lode is 1 ft. wide, containing tin—saving work.—Hambley's Lode: In the 52 west the lode is 3 ft. wide, saving work for tin. The winze in the bottom of the 65 is opening up moderately productive tin ground.

WEST CWM ERFIN.—Nov. 3: In the adit level, east of engine-shaft, the lode is 2½ ft. wide, containing a little ore, and letting out a great quantity of water. In the same level, east of cross-cut south (55 fms. east of engine-shaft), the south lode is 4 ft. wide, composed of spar, gossan, and clay-slate, with spots of lead ore, and promises early improvement. The cross-cut north in the adit level, 6 fms. east of engine-shaft, is being driven as fast as possible, but the ground is rather troublesome for exploring.

WEST DRAKE WALLS.—T. Gregory, Nov. 4: There is no change to notice in the 40 fm. level cross-cut north since last report. In the 40 fm. level cross-cut south we have intersected a branch about 4 in. wide, composed of capel, mundic, and spots of ore, of a promising character.

WEST GREAT WORK.—S. J. Reed, Nov. 4: In the 50, east from flat-rod shaft, the Great North lode produces tinstuff for the stamps. The 40 east looks promising, worth 6l. per fathom. The rise from the 30 will, I calculate, be holed during the week. The winze sinking under the 30, on the copper lode, yields 1½ ton of ore per fathom. The Great North lode, in the 8, east of Watson's shaft, is worth 15l. per fathom. This level, driving west of Harvey's shaft, is worth 5l. per fathom. The lode in the rise and stope, west of Watson's, is worth 15l. per fathom. The lode in the adit, east of shaft, is worth 4l. per fathom. In the winze sinking below the adit the lode is worth 15l. per fathom.

WEST MARIA AND FORTESCUE CONSOLS.—William Skewis, J. Donnal, Nov. 3: West Maria Lode: In the 60, east of Maria engine-shaft, the lode is very wet and troublesome for driving; it is 3 ft. wide, worth from 8l. to 10l. per fm. The lode in the 50 east is from 4 to 5 ft. wide, and is improved; it is now worth 15l. per fathom, and is promising for further improvement. The lode in the rise in the back of this level has fallen off in value, owing to a hard floor of capel having come in, now worth 10l. per fathom. The stopes in this and the 60 continue to be of the same value as reported for the meeting—10l., 16l., and 25l. per fathom respectively. The lode in the 40 east is 6 ft. wide, worth 8l. per fathom. On the whole, the mine is looking better than it has hitherto, and the ends are very promising for improvement.

WEST TOLGUS.—Nov. 4: Taylor's sumpmen are making fair progress in sinking Taylor's engine-shaft below the 95 fm. level. The lode in the 95 east is about 6 ft. wide, yielding from 5 to 6 tons of ore per fathom, worth 30l. per fm. In the rise over the back of this level the lode is 4 ft. wide, worth 25l. per fm. The lode in the 95 west is 6 ft. wide, yielding fully 7 tons of ore per fathom, worth 40l. per fathom. The stope over the back of this level is worth 35l. per fathom. In the 85 west the lode is 2 ft. wide—unproductive. The lode in the 85 east is 4 ft. wide, yielding 5 tons of ore per fathom, worth 20l. per fathom. In the 75 west the lode is 4 ft. wide, yielding 2 tons of ore per fathom. The lode in the 65 west is 2 ft. wide, unproductive, and very wet. We have four stopes working over the back of the 85, by 24 men, worth on an average 14l. per fathom. The lode at Richards's is from 5 to 6 feet wide, consisting of killas, mundic, blende, and occasional stones of ore.

WHEAL AGAR.—E. Rogers, Nov. 4: The lode in the engine-shaft still maintains its size and character, being 3 ft. wide, but without any change as to its value, and we may not see much improvement until the lode has passed through the elvan course. The lode in the 110 fm. level is 2 ft. wide, and worth for tin 8l. per fathom. We are making good progress in sinking the flat-rod shaft, the ground being still more favourable, which I hope will enable us soon to reach the desired object.

WHEAL BULLER.—James Inch, James Brown, Nov. 4: We have nothing new to report on since our last. We shall be ready with our batch of tin in time for the meeting.

WHEAL COURTENAY.—J. Gifford, Nov. 4: In the 20 west the lode is 4 feet wide, 2 feet of the south part yielding 1½ ton of copper ore per fathom, worth 6l. No change in any other part of the mine.

WHEAL CRELAKE.—W. Skewis, W. Hooper, Nov. 3: There is no change in the 86, 62, or 40 fm. levels since reported on for the general meeting. The rise in back of the 40 is communicated to the 28, which has given good ventilation to these levels. The lode in the 28, driving west from the rise referred to, is worth 9l. per fathom. The rise is being continued in back of the 28, where the lode is 2½ ft. wide, and worth 10l. per fathom. The tribute pitches throughout the mine are producing their usual quantities of copper and mundic ores. The lode in the costean pits is 3 ft. wide, and producing fine rocks of gossan, mundic, and copper ore, but, having cut water, we are obliged to suspend operations for the time. We sampled on Thursday last (computed) 219 tons of copper ore.

WHEAL FRIENDSHIP.—Nov. 3: Bennett's Lode: At the 170 west we have cut through the cross-course; the lode is about 1 ft. wide, poor. We think there is still more lode further north. In the 150, west of Whitburne's cross-cut, the lode is 5 ft. wide, producing 1½ ton of ore per fathom; from its appearance we expect an improvement shortly. In the rise in the back of this level the lode is 6 ft. wide, producing 4½ tons of ore per fathom for the length of the rise (10 ft.)

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Oct. 31: Setting Report: The new shaft is sunk as deep as the 140, and we have to-day set that level to drive west, by six men, at 3l. 10s. per fm.; lode 2 to 3 ft. wide, of gossan, quartz, and peach, that contains a little tin, but not to value. The 130 west, by four men, at 3l. 15s. per fm.; lode 3 to 4 ft. wide, with a little tin; a finer lode in appearance than this is no one can look at, and we are certainly at a loss to understand why it is not more productive. The winze below the 110 west, on the cross-course, by four men, at 3l. 10s. per fm.; we are hoping to hole this winze by the end of November, when we expect to be able to break some tin from the lode discovered in the south side, at the 120, some months since. The rise above the 110 west, by four men, at 11l. per fm.; lode producing stones of ore and tin. The 100 west, by four men, at 4l. 10s. per fm.; lode worth 8l. per fm. The 90 east by four men, at 6l. 10s. per fm.; lode worth 5l. per fm.; we expect after driving this level 2 fms. further it will let down some water, thereby enabling us to let some two or three tribute pitches. The winze to sink below the 90 west, by four men, at 7l. per fm.; lode 2 ft. wide, and opening tribute ground. The winze below 80 west, by two men, at 4l. 10s. per fm.; lode also opening tribute ground. The 66 west, by six men, at 8l. 10s. per fm.; lode 18 in. wide, and worth 12l. per fathom. The lode in the 54 west is worth 8l. to 10l. per fm. The lode in the 54 east is worth 6l. per fm. The lode in the 42 west is worth 8l. per fm.; and the lode in the 66, west from the new shaft, is worth 8l. to 10l. per fm. The levels are being wrought principally on tribute.

WHEAL KITTY (St. Agnes).—S. Davey, Wm. Polkinghorne, Oct. 31: In the 82, driving west of Holgate's shaft, the lode has this week improved for copper and is now worth for copper and tin 15l per fathom; a very kindly lode.—New Shaft, Pryor's Lode: In this shaft sinking below the 94 we have met with a hard capel course coming in from the cut, which has retarded our progress in sinking, but we hope to get through it soon. In the 94, driving east of shaft, the lode is worth for tin 17l. per fm.; the ground in this end is a little improved for driving. In the 94, driving west of shaft, the lode is large, and worth for tin 16l. per fathom, with an improved appearance. In the 82, driving east of shaft, the lode is much the same as last reported, worth for tin 9l. per fm. In the 82, driving west of shaft, the lode is worth for tin 13l. per fm. In the 65, driving west of shaft, the lode is at present poor. In the winze sinking below the 65, west of shaft, no lode has been taken down during the week.—Caunter Lode: In the 82, driving north of shaft, the lode is producing good work for stamps.—Vottle Lode: In the 24, driving east of cross-cut, the lode is improved in appearance, now producing good stones of tin.

WHEAL MARY ANN.—Peter Clymo, J. Harris, J. Stevens, J. Skeat, Nov. 4: Clymo's shaft is sunk 16 fms. under the 230. Since our last report we have intersected the lode in the 230; it is about 1 ft. wide, producing good stones of ore, with a very promising appearance, and we hope to be able to value it in our next. In the 220 north the lode is much the same as last reported on. In the same level south it is 4 ft. wide, worth 20l. per fathom. In the 210 north the lode is 2 ft. wide, producing stones of ore. In the same level south it is 2 ft. wide, worth 5l. per fathom. In the 200 north the lode is 2½ ft. wide, worth 4l. per fathom. In the same level south it is 2 ft. wide, worth 7l. per fathom. In the 190 north the lode is 3 ft. wide, worth 8l. per fathom. In the 180 north it is 2 ft. wide, worth 4l. per fathom. The stopes and pitches are producing much as usual. On Oct. 22 we sold to Messrs. the Burry Port Smelting Company our parcel of silver-lead ores, computed 62 tons, at 24l. 10s. 6d. per ton.

WHEAL TRELAWNY.—W. Johns, T. Grenfell, J. Pryor, Nov. 4: The fixing of the pitwork in Trelawny's engine-shaft, in the 220, will be completed as stated in our last report, after which the sinking of the shaft will we resumed, and forced on as fast as possible to make another level. We think it advisable to drive on the 220 north for several fathoms further for dispatch before cutting into the lode. We are making good progress in driving the 210 north by the side of the lode, and shall continue this course until a communication be effected with the winze sinking below the 196; this winze we shall now suspend, in consequence of the water being too powerful to be kept by manual labour until drained by the level below. In the 210 south we cannot report of much change; lode worth 6l. per fathom. The same remarks are applicable to the stope in the bottom of the 196, north of shaft, where the lode is worth 25l. per fathom. In the 196, south of Smith's shaft, and within 10 fathoms of the latter stope, we are to-day taking down the lode, which is worth 15l. per fathom. In the 152, south of Trelawny's, we are opening out moderate tribute ground, worth 5l. per fathom. In the 210, south of Smith's, the lode is 3 ft. wide, but not containing sufficient ore to value. In the 210 south the end is presenting a very kindly appearance, and upon the eve of entering the ore ground driven over in the level above. In the 196, north of Chippindale's, although we are still under the influence of slidy, disordered ground, we hope to speak favourably of the lode in our next report. We are very much pleased with the appearance of the mine to-day, seeing that we have met with the shoot of ore in the 196, south of Smith's, sooner than we expected, which evidently shows that the shoot of ore is lengthening in depth, and dipping towards Trelawny's engine-shaft. We are busily engaged in dressing for the next sampling, and shall sample our usual quantity.

WHEAL UNY.—S. Coade, M. Rogers, Oct. 31: We have set the engine-shaft to sink to the 150, by eight men and four boys, at 30l. per fm.; the lode in the shaft has changed its character by means of a dropper coming down from the south, and we shall see in a fathom or two what influence it has on the lode; its present value is 21l. per fm. for length of shaft. The 140, east of engine-shaft, is worth 30l. per fm. The 140, west of engine-shaft, is worth 8l. per fm. The 130, east of engine-shaft, is worth 10l. per fm. The 120, east of engine-shaft, is worth 14l. per fm. The 110, east of engine-shaft, is worth 9l. per fm. The 100, east of Goodinge's shaft, is worth 12l. per fm: The 140, east of incline shaft, is worth 6l. per fm. The 120, west of incline shaft, is worth 5l. per fm. We have sold to-day to the Redruth Tin Smelting Company 11 tons 15 cwts. 1 qr. 13 lbs. of black tin, at 58l. 5s. per ton.

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for September is 22. They have consumed 1484 tons of coal, and lifted 10·5 million tons of water 10 fms. high. The average duty of the whole is, therefore, 47,900,000 lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

Chiverton—Cookney's 60 in.	Millions	47·9
Cook's Kitchen—50 in.		48·0
Great North Downs—Sleggan's 70 in.		63·1
North Roskear—Doctor's 70 in.		53·4
North Wheal Crofty—Trevenson's 80 in.		55·4
Providence Mines—40 in.		48·1
South Wheal Frances—Marriott's 75 in.		49·9
West Chiverton—Hawke's 80 in.		66·6
West Wheal Seton—Harvey's 85 in.		59·0
Wheal Seton—Tilly's 70 in.		50·3

FOREIGN MINES.

PESTARENA.—T. Roberts, Oct. 27: The first of next month being on a Sunday, we shall smelt this month's amalgam from the three districts on Monday, Nov. 2. Telegram on the 3d. We never before had such long hindrances from rain and floods as we have had this month. We have not as yet been able to start the whole of the mills at Pestarena. The weather is now more favourable. We are going on repairing the damages done by the flood, but not as yet with a great force. The water in the Peschiera Mine is now lowered to the 66. In the mines underground—Pestarena, Battigio, and Val Toppa—there is no alteration worthy of notice since my last report on the 19th.

Telegram: Pallanza, Nov. 3, 4·30 P.M.—Remittance of Gold made to Office: Pestarena, 267 ozs.; Battigio, 58 ozs.; Val Toppa, 161 ozs.: total, 486 ozs.

LUSITANIAN.—Oct. 27; The lode in Taylor's engine-shaft, below the 120, is worth 1 ton of ore per fathom.—Levels on Basto's Lode: In the 120, east of Taylor's, the lode is 7 ft. wide, composed of quartz and flookan, and contains a branch of ore on the north side, worth 1 ton per fathom. The lode in the 120, west of Taylor's, is 3 feet wide, and yields 2½ tons of ore per fathom. The 110, east of the above shaft, produces ½ ton per fathom; and the 110 west yields ½ ton of ore per fathom. The lode in the 100, east of River shaft, is 1½ foot wide, composed of flookan; and on the north side we have a branch about 6 in. wide, containing stones of ore. The lode in the 90, east of River shaft, is 1 ft. wide, composed of dry flookan. In the 70, east of River shaft, the lode is 3 feet wide, composed of flookan and quartz, containing stones of ore. The lode in the 38, west of Perez' shaft, is 6 in. wide, composed of flookan. In the 8, west of Perez' shaft, the lode is 6 in. wide, composed of flookan. The adit west of the above shaft yields ½ ton of ore per fathom.—Levels on Slide Lode: The lode in the 100, west of Taylor's, is 4 ft. wide, being a mixture of flookan and country.—Ponte Lode: In the 28, east of slide, the lode is 8 in. wide, composed of quartz.—Cross-Cuts: The 60, north of River shaft, and the 60, south of Oak engine-shaft, are each composed of hard gneiss.—Winzes: No. 77 winze, below the 110, east of Taylor's, on Basto's lode, produces 4 tons ore per fathom. No. 75 winze, below the adit, west of Perez' shaft, is composed of flookan and country. There is no noticeable alteration in the stopes since last report.—Carvalhal Mine: The lode in the incline shaft, below the 40 fm. level, is unproductive, and the ground is rather harder than it has been.—Great Lode: The lode in the 40, east of incline shaft, is 2½ feet wide, composed of quartz, and worth ¾ ton of blende per

fathom. The 30 east yields 1½ ton per fathom. The 20 east produces ½ ton per fathom. In the 10 east the lode has not been taken down since last report, but we have every reason to believe that it is still worth 1 ton per fathom.—Caunter Lode: The lode in the 30, west of incline shaft, is 1 ft. wide, composed of quartz and mundic. The lode in the 40 west is disordered by a little cross flookan. We are now cutting in on the east side of the level after the lode. The lode in the adit, west of River Calma, on the north lode, is 4 feet wide, and contains spots of lead and copper ore. The stopes are just as usual.

[For remainder of Foreign Mines, see to-day's Supplement.]

*** With this week's Journal a SUPPLEMENTAL SHEET is given, which contains Original Correspondence—The Fun at Tondu Colliery, by J. D. Leigh—Steam-Boiler Explosions—Bromford Colliery Prosecution—Mechanical Ventilation of Collieries—the Weather and Colliery Explosions—Tube Wells—Gold Fields of South Africa, by John Robinson, F.R.G.S.—Chontales Gold and Silver Mining Company, by G. Noakes—Mining Region of Nevada——West Chiverton—the Royalton—the Gold Fields of New Zealand—Mineral Wealth of the Maritime Alps—the Ventilation of Coal Mines—Duration of Our Coal Supplies—Foreign Mine Reports—Australian Mines—Australian Mineral Products, &c.

*** With last week's Journal a SUPPLEMENTAL SHEET was given, which contains—New Tubular Liquation Furnace (*illustrated*), by Gustav J. Günther—Notes on Collieries in South Wales (*continued*)—The South-Eastern District—On Gases found in Coal Mines, and the Principles of Ventilation—Coal Mining in South Staffordshire—Mineral Properties; Creation of Matter (*continued*), by Samuel Jenkins—Articles on Mineral Properties, and their Reviewers—On the Waste of Mineral and Other Natural Products, by W. T. Rickard—Mining, and the Present Position of the Metal Market (*continued*)—The Mining Region of Nevada (*continued*)—Royalton Mine—Prince of Wales Mine, and Capt. Rowe, of Wheal Seton—Practical Engineering, Strains in Girders—Foreign Mine Reports, &c., &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 6, 1868.

COPPER.	£ s. d.	£ s. d.
Best selected..p. ton	76 0 0-	77 0 0
Tough cake and tile	74 0 0-	75 0 0
Sheathing & sheets,	79 0 0-	80 0 0
Bolts	78 0 0-	—
Bottoms	81 0 0-	—
Old (Exchange)	68 0 0-	70 0 0
Burra Burra ,,	80 0 0-	—
Wire.....per lb.	0 0 10½	—
Tubes ,,	0 0 11⅛	—

BRASS.	Per lb.
Sheets .....per lb.	7¼d.-8½d.
Wire ,,	8d.- —
Tubes ,,	10¼d.- —
Yellow Metal Sheath.p. lb.	6¾d.-7d.
Sheets ,,	6½d.-6¾d.

SPELTER.	Per ton.
Foreign on the spot	£20 7 6- 20 10 0
,, to arrive..	20 10 0- 20 15 0

ZINC.	
In sheets	£26 0 0- 27 0 0

TIN.	
English blocks	103 0 0
Do., bars (in barrels)	104 0 0
Do., refined	106 0 0
Banca	£103 0 0-104 0 0
Straits	101 0 0-102 0 0

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 6 0- 1 8 0
IX Ditto, 1st quality	1 12 0- 1 14 0
IC Ditto, 2d quality..	1 5 0- 1 6 0
IX Ditto, 2d quality..	1 11 0- 1 12 0
IC Coke	1 2 0- 1 3 0
IX Ditto	1 8 0- 1 9 0
Canada plates,p.ton	13 10 0- —
Ditto, at works	12 10 0- —

IRON.	Per ton.
Bars Welsh, in London	6 10 0- 6 12 6
Ditto, to arrive	6 10 0- —
Nail rods	6 15 0- 7 0 0
,, Staffd. in London	7 10 0- 8 10 0
Bars ditto	7 10 0- 9 10 0
Hoops ditto	8 2 6- 9 15 0
Sheets, single	9 0 0-11 0 0
Pig No. 1, in Wales	3 15 0- 4 5 0
Refined metal, ditto	4 0 0- 5 0 0
Bars, common ditto	6 0 0- —
Do. mrch. Tyne or Tees	6 10 0- —
Do., railway, in Wales	6 0 0- —
Do., Swed. in London	10 0 0-10 5 0
To arrive	10 5 0- —
Pig, No. 1, in Clyde	2 13 0- 2 17 0
Do. f.o.b. Tyne or Tees	2 9 6- —
Do. Nos. 3,4, f.o.b. do.	2 6 6- 2 7 0
Railway chairs	5 10 0- 5 15 0
,, spikes	11 0 0-12 0 0
Indian Charcoal Pigs, in London, p. ton	7 0 0- 7 10 0

STEEL.	Per ton.
Swed., in kegs(rolled)	— — —
,, (hammered)	15 0 0-15 10 0
Ditto, in faggots	16 0 0- —
English, spring	17 0 0-23 0 0
QUICKSILVER (p. bottle)	6 17 0- —

LEAD.	Per ton.
English Pig, com.	19 0 0-19 5 0
Ditto, LB	19 7 6-19 10 0
Ditto, WB	21 10 0- —
Ditto, sheet	20 0 0- —
Ditto, red lead	21 0 0- —
Ditto, white	27 0 0-30 0 0
Ditto, patent shot	22 0 0-22 10 0
Spanish	18 10 0-18 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—Nothing has arisen during the past week to interfere with the continued progress of the Metal Market in its onward course of improvement, or in any way to obscure the encouraging prospect now opened for the future, or hinder the full development of its resources at no distant period. Business appears now to be establishing itself upon its former firm basis, and there is every reason to anticipate that next year, at all events, we shall again return to our normal condition of activity and energy in commerce. The accounts from all quarters, both home and foreign, are decidedly more encouraging, while the close of the Presidential election in the United States will soon enable parties who have been actively engaged in it to turn their attention more seriously to trade, which is always to a certain extent affected by the excitement incident to the election of President; and we trust, now that the decision has been arrived at, that we shall find our commercial relations continuing with the harmony and mutual advantage which has characterised them for so many years. We trust, also, now that Spain has so greatly recovered from the exciting influences of the revolution, and that the Government appears fully established, and to be pursuing an enlightened and liberal policy, that it will be found that our commerce with that country will become considerably extended, and that advantages to trade will also be one of the results of the important change which has taken place in the form of Government there. The advices from India lately received speak rather encouragingly of a general improvement in business, and of a rather better feeling having arisen regarding metals.

COPPER.—The market for this metal remains much in the same condition as last week, and is not marked by much activity. Operations in Wallaroo, of a speculative character, have taken place to the extent of between 200 and 300 tons, at prices varying from 79*l.* to 79*l.* 15s. cash, and 80*l.* 10s. prompt three months. Chili bar has been sold at 68*l.* to 68*l.* 10s.

IRON.—In Staffordshire the works generally are well employed, and orders are now coming in pretty freely, and there appears every prospect of a still improved demand, and of a great business being done ere long. In Welsh the principal works are tolerably well employed, greater regularity being evinced in operations than has been the case for a long time. There has as yet been no substantial improvement in prices, but there is less underselling, and should the expected orders from the American and continental markets come to hand there is no doubt that the result will be an advance in quotations. Clearances for the United States are somewhat less than they were, although still considerable, the exports consisting almost exclusively of rails. Several cargoes are about to leave for South America. Continental engagements are coming in slowly, and, with the extension of railways in Austria, Spain, and other countries, there is a prospect of an increased demand. There is also a better sale on home account. In Swedish iron the demand is only moderate. In Scotch pig-iron there has been little fluctuation in prices during the week, and the market has generally remained quiet; the last prices received from Glasgow were 52s. 10½d. to 53s. cash, and 53s. 1½d. to 53s. 3d. one month.

LEAD.—No change has taken place in the market, sellers being still firm at the quotations.

TIN.—The market for Straits continued to improve during the greater part of the week, and business was done at 101*l.* to 101*l.* 10s. cash, and holders began to ask 102*l.* cash; however, more recently the market became somewhat easier, and business was done at 101*l.* cash; however, towards the close, the market again became firm, at 101*l.* to 101*l.* 10s. cash, and 102*l.* for arrival. In Holland the stock of Banca on warrants, on Oct. 31, was 149,759 slabs, against 172,601 slabs same time last year, and the arrivals towards next sale were 40,210 slabs, against 18,978 slabs same time last year. The quantity of Banca afloat for Holland was 4600 slabs, against 20,200 slabs same time last year, and the quantity of Straits afloat for England was 420 tons, against 1032 tons same time last year. The price of Banca, in Holland, is 59¼ fls. English continues very firm, at the late advance.

SPELTER.—The market continues inactive, and the price for parcels on the spot is not quite so firm, the present quotation being 20*l.* 7s. 6d. to 20*l.* 10s. The stock in London, on Oct. 31, was 1649 tons, being an increase of 755 tons during the month.

TIN-PLATES.—Makers are doing a moderate business, but no advance in quotations has yet been secured.

STEEL and QUICKSILVER remain in moderate request only.

THE COPPER TRADE.—Messrs. Turnbull and Watson (Liverpool, Oct. 30) write—Copper (foreign): As soon as it became known that the char ter for the first half of September were only 320 tons fine copper the demand becam active, but owing to the firmness of holders and the disinclination of buyers to pay the advance transactions have been limited to 632 tons bars, including 30 tons from second hands, at 67*l.* 10s. to 70*l.*, and 335 tons ingots, at 72*l.* to 73*l.* for Urmenita and 69*l.* 10s. to 70*l.* for Cousino; in ores and regulus 736 tons, at 14s. to 14s. 1½d. per unit. Sales since our last have been as follows:—

Mine or ship.	Tons.	Price.	Mine or ship.	Tons.	Price.
Bars—St. Thomas	25	£67 15 0	Bars—J. Edwards	25	£70 0 0
Bars—Halton Castle	66	67 10 0	Reg.—Emily Waters	406	0 14 0
Bars—Mercara	55	68 0 0	Ores— ditto	280	0 14 0
Bars—River Avon	50	68 0 0	Reg.—F. Nightingale	430	0 14 0
Ing.—Urmenita	75	72 0 0	Bars—To arrive	20	70 15 0
Ing.—Lota	121	69 10 0	Ores—Moonta	600	0 14 1½
Ing.—Urmenita	50	73 0 0	Bars—Lota	50	69 0 0
Ing.—Lota	100	70 0 0	Bars— ditto	23	69 0 0
Bars—Sundry ships	70	68 10 0	Bars—Basco	23	69 0 0
Bars—Lota	80	68 0 0	Ores—Moonta	640	0 14 1½
Bars—Basco	50	69 0 0	Ores—Canadian	310	0 14 2
Bars—Second hands	50	69 0 0	Bars—Second hands	40	69 0 0
Bars—J. Edwards	25	69 10 0			

Arrivals from the West Coast (South America) during the past fortnight:—Serena, from Coquimbo, 680 tons bars and 90 tons ingots; Ganymede, from Coquimbo, 697 tons bars and 185 tons ingots; San Lorenzo, from Valparaiso, 350 tons bars; Esmeralda, from Valparaiso, 100 tons bars; Egbert, from Lota, 215 tons bars and 215 tons ingots; Pacific, from Huasco, 166 tons regulus and 227 tons bars. At Swansea—H. Bath, 710 tons regulus; Tamaya, 500 tons regulus and 340 tons bars; Copiapo, 506 tons regulus; San Carlos, 157 tons regulus and 50 tons bars; Pathfinder, 468 tons regulus; John, 109 tons ores, 255 tons regulus, and 236 tons bars. Stocks of copper produce (Chilian and Bolivian)—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	1638	670	6384	1216	297
Swansea	2056	3014	1486	—	214
Total	3694	3684	7870	1216	511

Messrs. Vivian, Younger, and Bond (Nov. 6) write—The state of the Liverpool market for Chili produce has remained much the same, holders being indisposed to make concessions to buyers, and the latter declining to raise their limits. The consequence has been a blank week as regards West Coast produce. Values are quoted about the same. The arrivals of copper from Chili during the month of October have been very large, amounting to 6650 tons; nevertheless, the stock has only increased to the extent of 3000 tons. Small sales of fine foreign have been made at 79*l.* to 79*l.* 10s. for both Burra and Wallaroo. The market closes with a quiet but steady appearance.

THE TIN TRADE.—Mr. L. Th. van Houten (Rotterdam, Oct. 31) writes—We have to report a very great improvement in our tin market during this month; large quantities changing hands, especially on speculation, and as consumers have not yet bought to a great extent, their wants are still considerable, and must be supplied; and the market being really in a very healthy statistical position, we believe we can confidently look for a further improvement. Immediately after the Trading Company's public sale there was a great demand for Banca tin, and large sales were made, running the price up to 57 fl. A quieter feeling setting in for a few days, some holders accepted 56½ fl., but the market rapidly recovered itself, the English smelters raising the price of English tin 2*l.* on Oct. 17, advices at the same time reaching from the Straits, reporting prices of $26, equal to 105*l.* in London. A good demand was the immediate result, especially when, on Oct. 26, the price of English tin was again advanced 3*l.* in London, and up to 59½ fl. was paid in our market for Banca. Subsequently a rather quieter feeling set in, and some small sales were made again at 59 fl., but yesterday and to-day transactions again took place at 59¼ fl., and our market closes very firm at this quotation. Billiton tin has also been dealt in largely, prices generally following those paid for Banca. In the beginning of the month 54¼ fl. was accepted for parcels, both to arrive and on the spot, and a gradual advance took place to 58¾ fl., which is the closing quotation. There is not much Billiton tin offering just now, the imports of this month having mostly been previously disposed of, and especially parcels on the spot are very scarce. The deliveries and shipments during the month have been very large, amounting to about 11,000 slabs. The position of Banca tin in Holland on Oct. 31, according to the official returns published of the Dutch Trading Company, was:—

	1868.	1867.	1866.
Import in October ..... Slabs	24,237	17,324	15,294
Total ten months	109,546	94,952	177,183
Deliveries in October	14,720	14,950	33,250
Total ten months	113,037	99,993	151,955
Stock second hand	140,759	173,046	166,009
Total stock	180,969	192,024	217,198
Stock of Billiton	6,2?8	10,772	—
Import in October	10,830	—	—
Delivered and shipped in October.	10,811	—	—
Quotation { Banca	59¼ fl.	53½ fl.	46¼ fl.
Oct. 31.. { Billiton	58¾	52½	45½

The preceding returns, compared with those of 1867, exhibit—An increase of the import for Oct. of 214 tons; an increase of the import for the ten months of 452 tons; a decrease of the deliveries for Oct. of 7 tons; an increase of the deliveries for the ten months of 404 tons; a decrease of the stock second hand of 1001 tons: an increase of the unsold stock of 658 tons; a decrease of the total stock of 342 tons; an advance of the quotation of Banca of 5¾ fl. =9*l.* 12s. per ton. The quantity of Banca tin now afloat for the Dutch Trading Company is 2300 peculs, equal to 140 tons, against 10,100 peculs, equal to 625 tons, last year. The Government returns for the month of August are as follows:—

EXPORT OF TIN FROM HOLLAND.

	August.			Eight months.		
	1868.	1867.	1866.	1868.	1867.	1866.
Germany ..Tons	275	230	172	1540	1542	1411
Belgium	137	41	18	1076	343	297
England	52	53	51	381	166	471
France	23	118	139	147	581	1039
Hamburg	16	21	13	176	166	192
United States	—	18	—	54	27	159
Other countries	103	11	12	293	133	250
Total..Tons	606	492	405	3667	2958	3819

The MINING SHARE MARKET has been moderately active this week, without any material alteration in prices generally. The shares most dealt in have been Prince of Wales, East Grenville, Wheal Grenville, Great Laxey, Marke Valley, West Seton, Don Pedro, West Frances, Stray Park, Great Vor, Drake Walls, Chontales, Chiverton, West Chiverton, and a few others. The standard for copper ores remains stationary. West Chiverton, 61 to 62; in the 120 fm. level cross-cut, south of Hawkes's, the lode is worth 30*l.* per fathom. In a winze sinking below the 110 fm. level, 8 fathoms before the 120 end west, the lode is worth 80*l.* per fm. The 110, west of Hawkes's, on the south part, is worth 35*l.*; and the 110 west, on the north part, has improved to 40*l.* per fathom. Batters's shaft, sinking below the 100, is worth 60*l.* per fathom. The 100, west of Batters's, on south part, is worth 50*l.* per fathom. The 100, west of Batters's, on the middle part, is worth 40*l.* per fathom. The 100 west, 30*l.* per fathom; the 100 east, 15*l.* per fathom; the 100, west of No. 1 cross-cut, is worth 20*l.* per fathom; the 100 east, 20*l.* per fathom. Burgess's shaft, sinking below the 100, is worth 60*l.* per fathom. The 70, west of Batters's, is worth 30*l.* per fathom. Prince of Wales shares advanced to 45s. early in the week, but declined on Thursday to 41s., and leave off 40s. to 42s. 6d. The lode in the 65 east is worth 25*l.* per fathom. The 65 west is worth 10*l.* per fathom. The south part of the winze, in the 55 east, is worth 5*l.* per fathom, and the agents consider the main part of the lode to be still standing north of the winze. The new south lode, in the 55 fm. level cross-cut, is 1 ft. wide, composed of capel, quartz, mundic, and spots of lead and copper ore. The new south lode, in the 45, west of the cross-course, is worth 15*l.* per fm.

East Grenville, 4⅜ to 4⅝; the lode in the 110 east is 2 feet wide, worth 2½ tons of good ore per fathom; as fine a looking lode, the agent states, "as any man can look at." The 95 east is worth 1 ton per fathom, and an elvan met with similar to that seen in the 110 before the lode began to improve. The 75 east is worth from 1 to 1½ ton per fathom. The 55 east is 20 in. wide, worth from 2½ to 3 tons of ore per fathom. In the 45 there is about 7 ft. more to drive to reach the lode. The mine, it will thus be seen, is assuming an important position. South Frances, 15 to 20; at the meeting, on Monday, the accounts showed a loss on three months' working of 12*l.* 10s. 7d., and a balance in hand of 172*l.* 13s. 10d. Bedford United, 2 to 2½; Camborne Vean, 12s. 6d. to 15s.; Chiverton Moor, 6⅜ to 6⅝; Chontales Gold, 2⅜ to 2⅝; Cook's Kitchen, 12 to 13; Drake Walls, 15s. to 17s. 6d.; East Basset, 8 to 8½; East Caradon, 4¾ to 5; East Lovell, 8 to 9; Frontino and Bolivia, 13s. to 15s. Yudanamutana shares have advanced to 2½ to 2⅝; the advices from the superintendent at Adelaide, under date Sept. 10, deny all knowledge of the telegram of August, which got the shares up from 2*l.* to 6*l.* per share; and as it is evident it must have been concocted for jobbing purposes, the directors owe it to themselves to take every means in their power to discover its author. The mine report is very favourable indeed. The return of copper for the month is 45 tons 2 qrs.—a great increase on previous months. The ore raised in the month was 345 tons, the whole of which has been smelted, wood and charcoal coming in plentifully, and everything going on with great satisfaction. The remittance is 1000*l.* Don Pedro, 3¾ to 4; the directors intend on the 24th to recommend a dividend of 3s. 6d. per share, instead of 3s., as the returns for September have exceeded the estimates. Great Laxey, 19½ to 20½.

Redmoor, 3s. to 5s.; at the meeting, held on Thursday, a call of 1s. per share was made. The accounts showed a balance of liabilities over assets of 137*l.* 8d. 1d. The first sale of tin took place on the 3d, and was 2 tons 16 cwts., at 60*l.* per ton; and in about six weeks 3 tons more will be sold, and it is hoped the mine will pay its way. Great Wheal Vor, 13 to 14; Herodsfoot, 44 to 46; Marke Valley, 8¼ to 9; New Lovell, 17s. 6d. to 20s.; North Treskerby, 9s. to 11s.; Providence Mines, 26 to 28; Taquaril Gold, par to ¼ prem.; Stray Park, 4 to 5; Tincroft, 16 to 17; West Caradon, 2½ to 3; West Drake Walls, 7s. to 9s.; West Frances, 35 to 37½; West Seton shares have further advanced to 195, 205; Wheal Buller, 4 to 5; Wheal Chiverton shares advanced to 4½, 5, and leave off 4 to 4¼; Wheal Crebor, 8s. to 10s.; Wheal Grenville, 32s. to 34s.; Wheal Mary Ann, 19 to 20; Wheal Seton, 50 to 55. Wheal Uny, 3¼ to 3⅜; the stopes above the 130 are valued at 12*l.* per fathom; the back of the 140, 25*l.* per fathom. The 130 fm. level end east is worth 10*l.* per fathom; the 140 east, 30*l.* per fm. This end and the stopes in the back are the most important features in the mine, and they go to prove that the tin is more concentrated in depth; and looking at its improved character in depth, and its proximity to the elvan, there is no doubt, the agent thinks, that the mine will improve in depth, and that it will open out a lasting and profitable property; at present a profit of 250*l.* to 300*l.* per month can be made. As this is the South Carn Brea lode, we understand an influential company is in course of formation to work the latter mine again. The machinery is all upon it, and when it stopped, in 1866, the loss on six months' working was, we are informed, only 6*l.* 4s. 9d., and the last sales of tin were at 42*l.* 10s. per ton, and now tin has risen to 55*l.*, 60*l.* per ton it is considered good profits might be made. Great North Downs has improved in the bottom levels. The tutwork operations are in the aggregate valued at 117*l.* per fathom. The copper sold realised 2050*l.*, which, with the tin, leaves a good profit on the two months' working. Wheal Kitty (St. Agnes), 3½ to 4; the 82 west is worth 15*l.* per fathom; the 94, 17*l.* per fathom; the 94 west, 16*l.* per fathom; the 82 west, 13*l.* per fathom. At Caradon Consols a fine lode has been cut into 2½ feet wide in the 74 cross-cut north, consisting of gossan, fluor-spar, and black oxide of copper.

The Market for Mining Shares on the Stock Exchange has again been very active. Don Pedro shares have further risen to 3⅛, 3¼ prem.; Anglo-Brazilian, par to ⅛ prem.; Pestarena, 1⅛ to 1⅜ dis.; Chontales shares are steady, at 2⅜ to 2½; Rossa Grande, 7-16ths to 9-16ths prem., and in demand, and paid up 1⅛ to 1⅜ per share; United Mexican, 1⅜ to 2; Frontino and Bolivia, ⅝ to ¾, and in active demand; Port Phillip, 1¾ to 2; Capula Silver shares enquired for, at 3-16ths to 1-16th dis.; Yudanamutana, 2 to 2⅛, and steady at quotations; General Brazilian, 1-32 to 3-32 prem.; Taquaril, par to ¼ prem.; Nerbudda Coal, 2¼ to 1⅜ dis.; Vancouver Coal, 2⅜ to 3¼ prem.; St. John del Rey shares continue dull at 17½ to 18. In British Mines a large business has been done. Great Laxey shares have further risen, and close firm, at 20¼ to 20⅜; Great Wheal Vor, 12 to 13. Devon Great Consols, 370 to 380; independent of the profits from the copper workings, about 3000*l.* per annum, or 3*l.* per share, is being made from arsenical pyrites. Prince of Wales shares have fluctuated considerably, and are last quoted 41s. to 42s., and in demand. West Chiverton, 61 to 62; the lode in the bottom level has been cut into, and so far as seen is of equal value to where it was seen in the level above; a winze being sunk from the 110 is valued at 80*l.* per fathom, and other parts equal to former value. This great lode is completely drained to the lowest sinking, or Hawkes's shaft, leaving the lode to the west quite dry for working; and there are fine courses of ore in Batters's and in Burgess's shafts. Chiverton shares are firmer, and they close 4⅛ to 4⅜; Mineral Bottom, 3 to 3¼; Glan Alun, 12s. 6d. to 13s. 6d., and the prospects very good. The sampling at Rhosesmor for the month will be 80 tons of lead, for sale next week.

IRISH MINE SHARE MARKET.—The electioneering excitement, with all its detrimental influence on business on 'Change, continues, of course, to make itself felt stronger as the decisive day draws near, which, fortunately for dealings in shares, but the reverse for hotel keepers and railway companies, is now close at hand. Mining shares have again suffered unusual neglect, producing a tendency to lower prices, and transactions for long account instead of cash. Wicklow Copper Mining Company's shares (2*l.* 10s. paid) were first done, ex dividend, on Wednesday last, at 11*l.* 10s. to 11*l.* 12s. 6d., which, taking the dividend of 5s. per share into account, shows a decline from last quotation of 2s. 6d. to 5s., leaving off weakly. Mining Company of Ireland shares (7*l.* paid) were done during the week at 14*l.* 2s. 6d. to 14*l.* 5s., and close at 14*l.*, having a decline of 7s. 6d. per share on our last week's quotation. General Mining Company for Ireland shares (5*l.* 10s. paid) were a few days since pressed for sale at a reduction of 10s. per share on last previous transactions at 2*l.*, but this heavy fall brought a few buyers, and an advance of 2s. 6d., the closing price being 1*l.* 12s. 6d., and steady. Arklow Chemical Works have again changed hands at 18s. per share (1*l.* paid).

At Redruth Ticketing, on Thursday, 1717 tons of ore were sold, realising 7686*l.* 10s. 0d. The particulars of the sale were:—Average standard, 100*l.* 13s.; average produce, 7⅛; average price per ton, 4*l.* 9s. 6d.; quantity of fine copper, 123 tons 6 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Oct. 1	2535	£103 2 0	6¼	£3 13 0	11s. 9d.	£58 15 0
,, 8	1762	103 6 0	6⅛	3 11 6	11 8½	58 12 0
,, 22	3156	104 6 0	6¾	4 5 6	12 8½	63 10 0
,, 29	1741	98 4 0	7⅝	4 19 6	12 8	63 6 0
Nov. 5	1717	100 13 0	7⅛	4 9 6	12 5½	62 6 6

Compared with last week's sale, the standard is stationary. Compared with the corresponding sale of last month, the advance has been in the standard 1*l.* 12s., and in the price per ton of ore about 2s. 3d.

The following dividends were declared during October:—

Mine.	Per share.	Amount.
Wicklow	£0 5 0	£4250 0 0
South Caradon	5 0 0	2560 0 0
Marke Valley	0 5 0	2250 0 0
West Wheal Seton	5 0 0	2000 0 0
Dolcoath	5 0 0	1790 0 0
Herodsfoot	1 10 0	1536 0 0
Trumpet Consols	0 10 0	1000 0 0
Maes-y-Safn	0 5 0	750 0 0
Cwm Erfin	0 15 0	650 5 0
Cook's Kitchen	0 5 0	612 10 0
Cargoll	0 10 0	458 0 0
Bronfloyd	0 6 0	300 0 0
Chanticleer	0 0 6	32 0 0
Port Phillip	0 1 0	5000 0 0
Total		£23,188 15 0

At Cargoll Mine meeting, on Oct. 29, the accounts for the three months ending June showed a credit balance of 63*l.* 13s. The profit on the three months' working was 44*l.* 13s. 10d. A dividend of 45*l.* (10s. per share) was declared, leaving 17*l.* 13s. to credit of next account. Captains Grose and Tyzzer reported upon the various points of operation.

At South Wheal Frances meeting, on Monday (Mr. R. R. Broad in the chair), the accounts for August and September showed a credit balance of 17*l.* 13s. 10d. The loss on the two months' working was 12*l.* 10s. 7d. Capts. W. Pascoe and J. Priske reported upon the various points of operation. The levels westward continue to open tinstuff of low quality, but owing to the softness of the ground great progress is being made in their extension.

At West Prince of Wales annual meeting, on Thursday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts presented showed a credit balance of 27*l.* 7s. 5d. A call of 1s. per share was made, subject to 5 per cent. discount if paid previous to the 20th inst. The agent's report will be found amongst our Mining Correspondence.

At the Mineral Bottom Mine meeting, yesterday (Mr. E. Burgess in the chair), it was stated by the solicitor of the company (Mr. Glubb) that in 1860 a sett was granted to the late Mr. Cookney by Mr. Pater, of Chiverton and Mineral Bottom. Mr. Cookney devised the property to his wife. The property was worked as two separate and distinct undertakings, and in 1863 a part known as Chiverton was sold to Mr. Edward Burgess, and a company was formed, by whom the operations have been carried out to the present time. In the interim, Mrs. Cookney continued to work the Mineral Bottom Mine on her own account. In 1865 Mineral Bottom was sold to Messrs. Burgess and Hawke, and a company was formed, which continued operations until February, 1866, when workings were suspended, but no surrender of the sett was ever made, and no forfeiture took place. In consequence of the difficulty of selling the materials the company has continued in existence to the present time, and the assets were never divided. Owing to the recent discoveries in Chiverton, within a comparatively short distance of Mineral Bottom (although there is a considerable length of the lode in

the opposite direction in Chiverton sett). Messrs. Hawke and Burgess, as trustees for the company, deemed it an act of justice to the shareholders in Mineral Bottom to call them together to consult with respect to winding-up the concern and distribute the assets, or to carry on the development of the mine. Out of the 3000 shares into which the company is divided, 2830 were represented at the meeting in person and by proxy, by whom it was unanimously resolved "that in consequence of the discovery lately made in the adjoining sett of Wheal Chiverton, the shareholders in Mineral Bot om are of opinion that operations be re-commenced with the view to prove the value o. the lode which traverses the sett." The assets amount to about 1600*l*. A vote of thanks to the Chairman terminated the proceedings.

At Cape Cornwall Mining Company meeting, on Oct. 31 (Mr. Henry L. Phillips in the chair), the report of the directors and balance-sheet were received and adopted. Details in another column.

At the St. Just Amalgamated Mining Company meeting, on Oct. 31 (Mr. Henry L. Phillips in the chair), the report of the directors and the balance-sheet were received and adopted. Details in another column.

At the West Wheal Tremayne Mine meeting, on Wednesday (Mr. W. S. Sutton in the chair), the accounts showed a debit balance of 5*l*. 6s. 6d. The agent's report was considered satisfactory. It was resolved to continue driving the 32 and 20 fm. levels west, both of which are very kindly, and approaching productive ground, and to sink the engine-shaft another lift of 12 fms. forthwith, as there is an orey lode in the present bottom to start with, and there are 10 tons of ore on the mine towards another sampling. A call of 2s. per share was made to carry on the mine, making 12s. per share. It is fully expected that in depth, like in Wheal Squire adjoining, on the same lode west, the ore will be found in greater abundance and of better quality—in fact, very rich. It is admitted by all present that the prospects are satisfactory, and every dispatch in carrying out the work will be observed.

At East Wheal Seton meeting, on Oct. 29, the accounts showed a debit balance of 1188*l*. A call of 3s. per share was made.

At Creegbrawse Mine meeting, on Monday, the accounts showed a debit balance of 246*l*.

At Pendarves Mine meeting, on Oct. 29, the accounts to the end of June showed a debit balance of 12,952*l*., which it is estimated will be increased by the next meeting, four months hence, to 19,752*l*. A call of 5*l*. per share was made. The adventurers generally expressed their extreme disapprobation at the account having been made a six-monthly instead of a four-monthly one, as fixed by themselves at the last meeting, and resolved unanimously that the next meeting should be held in four months' time—the end of February. Mr. Henry Grylls, the largest shareholder, made some exceedingly judicious remarks in the course of the business, and Messrs. J S. Bickford, Davies, Rough, and others, also took part in the discussion. Although 13,000*l*. worth of tin has been sold, the report does not state who were the purchasers. The out adventurers should always have this information. Referring to the meeting, the *West Briton* says—"After the revelations that have recently taken place with regard to Clifford Amalgamated and other mines, to say nothing of the terrible bank failures and limited liability disclosures, we shall always contend that the mine adventurer, whether he be the holder of 100 shares or one only, has a right to demand the fullest information respecting the financial position of the mine he speculates in. What adventurer, for instance, in Pendarves United can be satisfied with a balance-sheet including, as Mr. Grylls says it does, "all items which in the course of 24 years had been paid for, but not charged, including four engines"—all summed up in four lines. Assuming, however, Mr. Grylls's balance-sheet to be a correct one, there must now be added to the debit balance of 12,952*l*., the September pay, which may be estimated at not less than 1800*l*.; add bills for June, July, August, and Sep ember, which cannot be much less, but which may be much more than 4000*l*.; and bankers' charges, lords' dues, and other items to the end of September (say), 1000*l* =19,752*l*. Thus, after crediting the tin to the 29th ult., it is quite possible, and very probable, that if every item had been charged to the end of September the mine would have been little, if anything, less in debt than 20,000*l*.! And to meet this they have made a call of 1280*l*. only.

At the Lily Quarries Slate and Slab Company meeting, on Sept. 29, it was resolved to wind-up the company voluntarily, and that Mr. Philip Kent and Mr. S. Jones be the official liquidators.

The directors of the Kapunda Mining Company (Limited) have declared a dividend of 6d. per share, free of income tax.

At the United Mexican Mining Company meeting, on Wednesday (Mr. Charles Morris in the chair), the report of the directors was received and adopted. Details in another column.

At the Peruvian Mineral Company meeting, on Wednesday (Mr. Charlwood in the chair), it was resolved that the sum of 2400*l*. be raised, by the issue of 60 debentures of 50*l*. each, 2000*l*. in all, bearing interest at 10 per cent. per annum, redeemable at any time at the option of the company, and that the price of issue be 40*l*. each. Details in another column.

At the Vancouver Coal Mining Company meeting, on Tuesday (Mr. Galsworthy in the chair), the report of the directors was received and adopted, and a dividend of 10 per cent. for the half-year was declared. Details elsewhere.

At Frank Mills Mine meeting, the accounts to be presented will show a debit balance of 738*l*. The statement of assets and liabilities, taking credit for ores sold in October, but without debiting September cost, shows 1076*l*. in favour of the company. The committee state this amount includes every liability, and they propose placing the balance to a reserve fund. The mine continues to yield the same quantity of ore as for some time past and there is every reason for expecting the same good result in the ensuing as in the past quarter, which showed an increase of 900*l*. in the returns.

At North Wheal Chiverton meeting, to be held on Thursday next, the accounts for the three months ending September will show a credit balance of 367*l*. 7s. 8d. The loss on the three months' working is 824*l*. 1s. 11d. Capts. W. Hancock and W. T. Bryant report that during the three months the quantity of ground sunk and driven has been 36 fms. 5 ft. The average cost of driving levels has been 3*l*. 6s. 10d. per fm., and the average earnings of the tutworkmen 3*l*. 6s. 1d. per man per month.

At the Capula Silver Mining Company meeting, to be held on Thursday, the directors' report and statement of accounts will be submitted. The accounts embrace a general statement of the receipts and expenditure for the eight months to the end of August, and the Mexican accounts for the seven months to the end of July. The directors' report states that of the call last made 1500*l*. remains in hand, and that if Capt. Paull's expectations be realised, very little of this money will be required by him, unless it may be for the more vigorous prosecution of the reduction works.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 326,255*l*., which is represented by a corresponding decrease in the coin and bullion on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "public deposits" of 152,076*l*., and a decrease in the "other deposits" of 1,298,459*l*., in the "seven day and other bills" of 23,588*l*., and in the "rest" of 11,783*l*., together 1,333,830*l*.=1,181,754*l*. On the asset side there is a decrease in the "Government securities" of 500,000*l*., and an increase in the "other securities" of 22,859*l*.=477,141*l*., showing a decrease in the total reserve of 704,613*l*.

Mr. C. H. Fielder, secretary of the Port Phillip and Colonial Gold Mining Company, accompanied by Mr. F. Maples, transacted business on Wednesday at the office of the Board of Trade.

The committee of the Stock Exchange appointed the 6th inst. a special settling day in the shares of the General Brazilian Mining Company (Limited), which are to be officially quoted.

The directors of the Brazilian Street Railway Company have given notice that as the applications have exceeded the entire number of shares to be allotted the list has been closed.

COAL MARKET.—This week 109 fresh ships arrived. Business has been of a steady character throughout, and prices of all descriptions of household coal have been firmly supported. Hartley's rather dull, at a decline of 6d. Hetton Wallsend, 19s.; South Hetton Wallsend, 18s. 6d.; Braddyll's Wallsend, 17s. 6d.; Gosforth Wallsend, 16s. 3d.; New Belmont Wallsend, 16s. 3d.; Hetton Lyons Wallsend, 16s. 3d.; Eden Main, 16s. 6d. Unsold, 3 cargoes: 45 ships at sea.

Mr. J. R. Scott, the Registrar of the London Coal Market, has published the following statistics of imports and exports of coal into and from the port and district of London by sea, railway, and canal during Oct., 1868:—

IMPORTS.

By Sea.	Ships.	Tons.
Newcastle	297	144,763
Seaham	45	11,689
Sunderland	176	81,096
Middlesborough	15	5,867
Hartlepool	129	36,867
Blyth	2	1,039
Scotch	15	3,945
Welsh	12	2,809
Yorkshire	19	1,872
Small coal	4	2,518
Cinders	6	536
Total	720	292,521
October, 1867	546	241,562

By Railway and Canal.	Tons.	cwt.
London and N.-Western	94,490	16
Great Northern	101,791	0
Great Western	37,053	0
Midland	14,335	17
Great Eastern	32,498	7
South-Western	1,959	16
London, Tilbury, &c.	123	0
London, Chatham, and Dover	1,132	0
South-Eastern	1,558	16
Grand Junction Canal	852	15
Total	285,795	7
October, 1867	271,506	15

COMPARATIVE STATEMENT, 1867 AND 1868.

By Sea.	Ships.	Tons.
Jan. 1 to Oct. 31, 1867.	5626..	2,440,526
Jan. 1 to Oct. 31, 1868.	5912..	2,437,099
Decrease in pres. year	— ..	3,427
Increase in pres. year	286..	—

By Railway and Canal.	Tons.	cwts.
Jan. 1 to Oct. 31, 1867...	2,663,229	6
Jan. 1 to Oct. 31, 1868...	2,374,386	14
Decrease in present year.	288,842	12

LIFE ASSURANCE FOR THE WORKING CLASSES.—The Britannia Life Assurance and Investment Company has just issued a series of tables, especially intended for the working classes. They show that for 3d. a week a man aged 21 years may secure 24*l*. at death; for 8d. per week a man of the same age may secure 10s. per week during sickness, and 25*l*. at death. It is remarked that whilst the practice of life assurance has been extensively adopted by the wealthier and educated classes, it is a circumstance much to be regretted that so little has been done to familiarise the great body of the people with its advantages. The directors of the Britannia Life Assurance and Investment Company (Limited) have inaugurated a plan of popular assurance, by means of which the humblest in the community can, by a small weekly saving, provide for the comfort and independence of their wives and children. The company grants its policies to miners and colliers at an addition of ten years to the life.

DON PEDRO NORTH DEL REY.—The directors have notified that the September produce having amounted to so much more than had been expected, they will recommend at the meeting, on Nov. 24, the payment of 3s. 6d. per share, instead of 3s. as heretofore announced.

MINING IN BRAZIL.—The rich old mine—the Taquaril—has again been started in good earnest by an influential company of shareholders. Capt. Williams is already on his way to the mines, and Messrs. Nicholls and Mathews, of the Tavistock Iron Works, are busily engaged in getting the machinery ready for shipment to the Brazils. The mine adjoins the celebrated St. John del Rey Mines, which paid large dividends for many years. The names of the officials, and the fact of the secretaryship having been entrusted to Mr. E. J. Cole, are a guarantee of the substantial character of the undertaking.

CWM DWYFOR COPPER AND SILVER-LEAD MINES.—The level cutting into the upper copper lode, 12 fathoms below the point where large quantities of ore have formerly been raised, is proceeding expeditiously, and the lode is likely soon to be intersected at that depth. From the unquestionable character of this huge lode near the surface, and its yield of copper where laid open, there is no doubt that at 12 fms. deep it will prove highly remunerative. The cutting is at present wholly in debris, and it is doubtful if any rock will be cut into before the lode itself, like a perpendicular cliff, is reached. The progress of this extraordinary mine will be noted from week to week, which is attracting great attention. Hitherto Cornish mines seem to have had precedence of all other home mining enterprises. For the reasons stated it is clear that capital must eventually be diverted from Cornish to Welsh mining, where the inducements to invest are in every sense so much greater, and it does seem matter of surprise that within the limits of our own island such unquestionable advantages, and opportunities for profitable employment of capital, should have so long remained comparatively neglected and unappreciated. If such a mineral property, moderately authenticated, were situated in Africa, multitudes would be ready to embark their capital in what they could never expect personally to have the opportunity of seeing. In this case, all persons at merely trivial cost, can go and prove the accuracy of every statement made respecting it. Such seems to be the infatuation where distance alone lends enchantment to the view. It is to be hoped sounder and soberer business maxims will in future regulate our mining capitalists, and that they will not forget that at home we have opportunities for the employment of capital, both sound and profitable.

WEST ST. IVES CONSOLIDATED.—A valuable opinion on this mine has been received from Capt. Nancarrow, who, in addition to his former report, as advertised in the Journal on Oct. 17, adds as follows:—"You will have already seen my report of this mine, which is based not only on an examination of the mine itself, but on long experience in tin mining, and an intimate knowledge of this district, having been manager of St. Ives Consols and other mines in the neighbourhood for several years. I consider this the best piece of tin ground that I know of anywhere, except those now in actual course of working, and feel confident that if properly worked with a moderate capital it will give good profits to the adventurers. The only apparent reason for its having been recently idle was the very great depression in the tin market, but this is rapidly passing away. We have had a rise of 4*l*. 4s. per ton within the last three weeks, and higher prices are fully expected. It should be remembered, too, that the tin in the mine is of better quality, and commands a higher price than that of any other in the neighbourhood. Thus, on all accounts, it strongly recommends itself to the notice of investors."

GEOLOGICAL SOCIETY.—The first meeting of the session (1868-69) will be held on Nov. 11, at 8 P.M. Papers to be read:—
1.—"Notes comparing the Geological Structure of North-West Siberia with that of Russia in Europe;" by Sir R. I. Murchison, Bart., K.C.B., F.R.S., &c.
2.—"On the Construction of Deltas, and on the Evidence and Cause of great Changes in the Sea-level during the Glacial Period;" by A. Tylor, F.L.S., F.G.S.
3.—"On a Section of a Well at Kissingen;" by Prof. Sandberger, F.C.G.S.

SOCIETY OF ENGINEERS.—At the meeting of members, on Monday, Mr. Baldwin Latham (President) in the chair, a paper was read by Mr. Henry Gore, "On Modern Gas Works at Home and Abroad." The following candidates for election were duly elected as *Members*:—George Garnett, Ryde, Isle of Wight; A. D. Dawnay, C.E., 37, Maismore-square; W. Gaskell, Weston-super-Mare; E. S. Crompton, C.E., Stafford; John Waldram, 203, Whitechapel-road. As *Foreign Members*—R. M. Dixon, C.E., Tanna, Bombay; R. Pinchin, C.E., Cape of Good Hope.

HYDRAULIC JACK.—Mr. T. Armstrong, an ingenious mechanic, has invented a hydraulic jack, which, from experiment, promises to be of great advantage both on the score of efficiency and economy. By the old system it would require ten men to sling a wagon, &c., weighing 12½ tons, but by means of this invention two men can lift a wagon of the same weight, or a 23-ton gun, with the greatest ease.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending Nov. 1 amounted to 9967*l*. 12s. 6d.

WANTED, a GOOD PRACTICAL ENGINEER, to undertake the MANAGEMENT and WORKING of IRON MINES. He must understand the qualities of hematite ironstone, and be thoroughly acquainted with the best mode of developing iron properties. To such a person liberal terms are offered.
Address, with copies of testimonials, and stating expectations, to "Iron Company," care of Mr. Wolpert, 3, Birchin-lane, London, E.C.

A CORNISH ENGINEER, who has had several years' experience both at home and abroad, in SUPERINTENDING the CONSTRUCTION and WORKING of all kinds of MINING MACHINERY, is OPEN to an ENGAGEMENT. Is a good draughtsman, and thoroughly understands gold crushing and amalgamating machinery. Good references
Address, "W. D. H.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

SITUATION WANTED, as ASSAYER, ANALYTICAL CHEMIST, or ASSISTANT MANAGER. Has had two and a half years' practical experience.
Address, "Omega," Post Office, Swansea.

A GENTLEMAN, who has served an apprenticeship of four years to a MECHANICAL AND MINING ENGINEER; has seen many Mining and Smelting Works here and on the Continent; has been employed in Designing, Constructing, and Working large Dressing Works on the newest German principles; and has passed the Examinations and worked in the Laboratories of the School of Mines; DESIRES an ENGAGEMENT. Speaks German and Swedish.—Address, "W.," 14, Brighton-park, Clifton.

TO LEAD SMELTERS.—WANTED, a WORKING FOREMAN, THOROUGHLY ACQUAINTED with his BUSINESS, and WILLING to UNDERTAKE the MANAGEMENT of the DESILVERISING DEPARTMENT; also, TWO FURNACEMEN.
Apply, by letter, to WESTON and COLLINGBORN, 18, Peter-street, Bristol.

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TO COLLIERY PROPRIETORS, AND OTHERS.—TO BE SOLD, an excellent WIRE CAPSTAN ROPE, made by the eminent firm of GLASS, ELLIOTT, and Co., being 80 fms. long and 1¼ in. diameter.
Apply to Mr. ROBERT EVANS, Butterworth Hall, near Rochdale.

BLAKE'S CRUSHER, NEW or SECONDHAND, WANTED; also, a STEAM ENGINE, and all the necessary connections for working the crusher.
Size, price, and full particulars to be addressed to "Quarryman," MINING JOURNAL Office, 26, Fleet-street, London.

PONTIGIBAUD SILVER-LEAD MINING AND SMELTING COMPANY.—The ORDINARY ANNUAL GENERAL MEETING of the shareholders of the above company will take place in Paris, at the offices of the company, No. 24, Rue Richer, on MONDAY, the 30th day of November inst., at One o'clock, P.M., precisely. The qualification to take part in this meeting is the holding of 20 shares, which must be deposited at the offices of the company, in Paris, or at the agency in London, ten days before the meeting takes place. Shareholders may be represented by proxies at the meeting, but no one can be the bearer of a proxy unless he himself is the owner of 20 shares. Proxies must be upon French stamped paper, and according to the form, which can be obtained at either of the offices of the company.
JOHN TAYLOR AND SONS.
London Agency, No. 6, Queen-street-place, Nov. 6, 1868.

THE BRAZILIAN STREET RAILWAY COMPANY (LIMITED).
Capital £100,000, in 50,000 shares of £2 each.
First issue, 25,000 shares of £2 each.
The liability of the shareholders is limited to the amount of their shares, the company being registered under the Companies Acts, 1862 and 1867, with Limited Liability.
Deposit 4s. per share on application, the balance in instalments as follows:—
6s. on the 5th January, 1869.
10s. on the 5th April, 1869.
20s. on the 1st July, 1849.
Shareholders paying in full on or before Jan. 5 will be entitled to receive their dividend upon the £2 per share so paid. The dividends on the shares paid by instalments will be only calculated for the first half year—viz., to June 30, 1869, on the 10s., being the 4s. payable on application, and the 9s. on Jan. 5, 1849. Interest, however, at the rate of 5 per cent. will be paid out of revenue on the second instalment (if paid on April 5), up to June 30, 1869. The directors confidently anticipate that the first dividend will not be less than 10 per cent. per annum.
DIRECTORS.
CHAIRMAN—HENRY HAYMEN, Esq., Chairman Don Pedro North del Rey Gold Mining Company (Limited).
WILLIAM MARTINEAU, Esq., C.E., Liverpool and Brazil.
SAMUEL JOHN WILDE, Esq., Director Bombay, Baroda, and Central Indian Railway Company.
BARAO DO LIVRAMENTO,
DR. JOSE BERNARDO GALVAO ALCOFORADO, } Brazil.
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AGENTS.
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IN BRAZIL—Messrs. JOHN MOORE and Co.
BROKER—JOHN H. GOLDING, Esq.
SOLICITORS.
Messrs. STEVENS, WILKINSON, and HARRIESS, 4, Nicholas-lane, E.C.
AUDITOR—PERCY HEURTLEY, Esq., 5, Austinfriars, E.C.
SECRETARY—HERBERT HEATH, Esq.
OFFICES,—35A, MOORGATE STREET, E.C.
APPLICATIONS having EXCEEDED the entire NUMBER of SHARES, the LIST is CLOSED. By order, HERBERT HEATH, Secretary.
3d November, 1868.

INVESTMENTS.
MESSRS. FAIRBAIRN AND CO., MINING ENGINEERS, STOCK AND SHARE DEALERS, NO. 160, GRESHAM HOUSE, OLD BROAD STREET, LONDON, TRANSACT BUSINESS, for cash or account, in Stock Exchange or other Securities.
Our "Guide" for the present month is now ready, and can be had free upon application. It contains particulars of the best paying and safest Progressive Undertakings, Stocks, Debentures, Bonds, and Shares.
A daily Price List, showing the latest quotations, with special remarks upon Mines, Banks, Railways, Gas, and Water Companies, together with English and Foreign Stocks and other Securities.
Published every evening at Six o'clock, and will be forwarded on receipt of stamped envelope.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Oct. 20	Isle of Islay	55	£13 10 6	Walker, Parker, & Co.
31	Great North Laxey	45	13 4 6	Stock & Co.
Nov. 2	Brynpostig	30	11 8 0	Sims, Willyams, & Co.
—	Frongoch	130	11 8 0	ditto
—	Glogfawr	26	13 7 6	Runcorn Smelting Co.
—	East Darren	75	15 14 6	Adam Eyton.
—	Goglnan	40	16 9 6	Stock and Co.
—	Cwm Erfin	26	15 7 6	ditto
—	ditto	26	15 12 6	Weston & Collingborn
3	Maes-y-safn	40	12 16 0	Panther Lead Co.
—	ditto	40	12 16 0	ditto
—	ditto	20	12 17 0	ditto
4	Plynlimmon	50	11 10 0	Mining Co. of Ireland.
5	Van (Llanidloes)	125	13 2 6	Walker, Parker, & Co.

BLACK TIN.

Date.	Mine.	Tons. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
Oct. 31	Wheal Uny	11 15 1 13	£58 5 0	—	—Redruth.
Nov. 5	New Wh. Lovell	8 11 1 0	60 0 0	£513 15 0	—

COPPER ORES.
Sampled Oct. 21, and sold at Tabb's Hotel, Redruth, Nov. 5.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Seton	73	£7 12 6	East Pool	24	£3 11 6
ditto	70	8 5 6	ditto	4	10 4 0
ditto	66	8 5 6	South Crofty	83	2 0 0
ditto	63	3 10 6	ditto	57	2 1 6
ditto	61	4 9 0	South Frances	54	5 12 6
ditto	60	2 11 0	ditto	36	4 5 6
ditto	59	2 9 6	ditto	26	5 8 6
ditto	54	3 14 6	East Grenville	30	3 8 6
ditto	51	5 5 6	ditto	29	3 4 6
Clifford Amalgamated	76	3 18 6	ditto	25	3 0 6
ditto	75	4 4 6	ditto	14	10 2 0
ditto	70	7 15 6	ditto	5	5 0 0
ditto	61	3 11 6	North Grambler	35	3 19 0
ditto	55	2 7 0	ditto	28	6 13 0
ditto	54	8 3 6	Falmouth & Sperries.	34	4 2 6
ditto	46	6 2 6	Wheal Busy	15	2 3 0
ditto	43	2 9 6	ditto	10	1 5 0
ditto	21	4 5 0	Nangiles	13	2 4 0
East Pool	75	2 9 6	Wheal Grenville	7	2 16 0
ditto	49	2 5 6	Pendarves United	6	2 5 0

TOTAL PRODUCE.

West Wh. Seton	557	£2944 14 0	North Grambler	63	£ 324 9 0
Clifford Amalgam	501	2425 12 6	Falmouth & Sper.	34	140 5 0
East Pool	152	423 14 0	Wheal Busy	25	44 15 0
South Wh. Crofty	140	284 5 6	Nangiles	13	28 12 0
So. Wh. Frances	116	598 14 0	Wheal Grenville	7	19 12 0
East W. Grenville	103	438 6 0	Pendarves United	6	13 10 0

Average standard £100 13 0 | Average produce 7⅛
Average price per ton £4 9 6
Quantity of ore 1717 tons | Quantity of fine copper 123 tons 6 cwts.
Amount of money £7686 10 0
LAST SALE.—Average standard £ 98 4 0—Average produce 7⅞
Standard of corresponding sale last month, £103 2 0—Produce, 6½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	180½	£ 822 8 3
Freeman and Co.	90	368 5 0
Grenfell and Sons	171½	1273 12 9
Sims, Willyams, and Co.	89	634 16 0
Williams, Foster, and Co.	194½	1403 16 9
Mason and Elkington	326	1270 16 9
Bankart and Sons	268	736 8 3
Copper Miners' Company	210½	559 6 6
Charles Lambert	164	875 17 9
Sweetland, Tuttle, and Co.	23	41 2 0
Total	1717	£7686 10 0

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next.—Mines and Parcels.—West Wheal Basset 239—Prosper United 231—East Rosewarne 138—Copper Hill 93—North Roskear 85—Botallack 75—Levant 34—Champion's Ore 31—Wheal Buller 21—North Pool 21—Buglehole's Ore 20—Great Work 10—Wheal Agar 10.—Total, 1007 tons.

Copper ores for sale at the Royal Hotel, Truro, on Thursday week.—Mines and Parcels.—Devon Great Consols 1683—Marke Valley 499—Crelake 219—Bedford United 190—East Caradon 190—West Maria and Fortescue 175—Prince of Wales 123—Wheal Friendship 118—Gunnislake (Clitters) 75—Kelly Bray 66—Cawsand Vale 65—Wheal Crebor 63—East Russell 41—Belstone 37—Caradon Consols 31—Old Gunnislake 25—Devon and Cornwall 25—Collacombe 12—Total, 3637 tons.

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To which is added THE LAW OF CONTRACTS, by W. CUNNINGHAM GLEN, Esq., Barrister.

London: ATCHLEY and Co., Engineering, Scientific, and Architectural Publishers, 106, Great Russell-street, W.C.

F. N. GISBORNE'S PATENT MECHANICAL BALANCE-WEIGHT SIGNALS FOR MINES, &c.

THESE SIGNALS supply a want long felt in giving INSTANT COMMUNICATION in MINES at SEVERAL PLACES at the SAME TIME without the aid of electricity, but by a single rod or chain; so that a degree of safety is ensured hitherto unknown.

The price is also very low, and the mechanism so simple that any ordinary mechanic could put it in order if out of adjustment.

The same patent, as applied to ships, has received the approval of the Chief Engineer, Chatham Dockyard (vide *Times*, Aug. 13, 1868).

SOLE AGENT FOR MINERS:

MR. GEORGE B. JERRAM, ENGINEER, 5, GREAT QUEEN STREET, WESTMINSTER.

N B.—Mr. JERRAM is now visiting the different mines with working models.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

QUARRYING.—"A Subscriber" will feel deeply obliged for any information in reply to these questions:—1. Is there any means of obtaining here Nobel's "Dynamite"—that is, the nitro-glycerine in a solid form, discovered by the Swede Nobel? 2. Where were the boring-machines made which are now at work in the Mont Cenis Tunnel; what is the maker's name, and the price?

CALDBECK FELLS.—It has been stated, and therefore I think the matter should be ventilated through your columns, that our property is looking very much better than is indicated by the periodical reports which appear in the Journal. Some have gone so far as to say that the men have been, and it may be still are, menaced with instant dismissal if they disclose the fact that a discovery of considerable importance has been made in the Mexico portion of the mine. It has been further stated, upon what would appear to be reliable authority, that the shares are being quietly absorbed by those who are behind the scenes. Those are statements which are seriously and publicly made, and therefore it is the duty of the executive to at once contradict them.—A SHAREHOLDER.

THE DOWSING ROD, AND WHEAL CHIVERTON.—Being an unscientific Cornishman, I may be excused for my simplicity and credulity in believing in the virtues of the dowsing rod, and also to publish to the world anything and everything that may tend to dissipate the doubts existing in the minds of others as to the practical efficacy of this magic wand. For this reason, I solicit the favour of a few lines in the Journal, in order to inform your readers that the discovery of the new lode in the trial shaft at Wheal Chiverton was made by means of the dowsing rod. It seems that an old miner employed upon the property had for a long time past, *before* the trial shaft was commenced, urged the agents to test this point, because he said "he knew a lode would be there discovered, his dowsing rod never having deceived him." The result is known, a lode having been discovered worth at one time 3 tons of ore per fm., while the shares, instead of selling at 2s. 6d., are more than 4*l*.—A MINER.

SOUTH STAFFORDSHIRE: ITS COAL, AND ITS INSPECTION.—We have received a further communication from "Another Iron and Coal Master," for which we will endeavour to find room in next week's Journal.

HARPER'S PATENT SAFETY CAGES—"India."—Detailed reference to the invention in question is given in another column of this day's Journal.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, NOVEMBER 7, 1868.

OUR COMPETITORS.

Facts of a discomposing character to all who are engaged in the iron and machine industries of this kingdom are being made patent by the incontrovertible logic of figures. Let our readers look on this picture and then on that, and they will see that whilst in the first three months of the past three years respectively the machinery exported showed a decrease, unwrought iron and steel showed an increase. Here are the true pictures:—

MACHINERY.			IRON AND STEEL (UNWROUGHT).	
Year.	Steam-engines.	Other kinds.	Year.	Tons.
1865	£538,149	£757,643	1865	277,450
1866	310,169	657,595	1866	335,363
1867	397,833	604,471	1867	353,903

Let this also be taken in connection with the the fact that in 1866 we imported 64,178 tons of unwrought iron, a larger quantity by about 10,000 tons than in any previous year since 1850, and nearly 13,000 tons more than in 1865; whilst in addition, the manufactured iron which we buy is increasing in worth year by year. For instance, whilst in 1860 the value of the manufactured iron which we purchased was only 47,869*l*., that which we took in 1865 was set down at 391,696*l*. This should be read with the knowledge of the further fact that the value of the old iron sent out of this country for re-manufacture in continental mills and forges was 60,645*l*. in September this year, against 16,501*l*. in September, 1867, and 4457*l*. in 1866.

Now, let attention be paid to the testimony just made public by the Trades Union Commissioners, given before the body at their last sitting by Mr. JOHN ROBINSON, engineer and director at the Atlas Works, Manchester, of which he was formerly a proprietor, and where 1600 men are employed. He says—

"Whilst at one time we had the control of certain markets we have lost it, and these very people—for instance, Prussia and Wurtemberg, and France and Austria, to whom we formerly sent locomotive engines, have now become manufacturers themselves for their own countries, and very important competitors with us for neutral markets; I mean, excluding their own country and ours, such markets as Russia, Spain, Portugal, Italy, and so forth. In the year 1839, for instance, our supplies of locomotive for foreign countries began to assume a large proportion to the total production. In 1839 we made for England 21 locomotives, and for foreign countries we made 26, so that you see we made more for abroad than we did for England. In 1844 we made for England 26, for foreign countries 18, and so we go on. Taking the year 1841, Holland then begins to be the customer as her railway system gets developed, and buys locomotive engines. Then, in 1842 Italy begins. In 1843 Russia begins. Then, in 1844 Russia ceases entirely for a time; her railway system does not get developed. And now France and Germany compete with us for Russia, and beat us in nine cases out of ten out of the market. Then, in 1846 France ceases to be a customer, and begins to make her own engines. In 1847 Germany, which had been one of our best customers, ceases nearly, and we have no demand either from France or Germany after that time, except for, perhaps, one or two engines. I am speaking in general now. In 1855 we began with such countries as Egypt; then Prussia again; then South America and the colonies. But it will be found on looking at all these figures that the proportion of engines supplied for abroad since the year 1855 or 1856 has been constantly diminishing as compared with the number supplied for England, indicating what, in fact, the actual returns show, that the foreigners are becoming not only manufacturers for themselves, but manufacturers for other countries than their own, and, therefore, competitors in neutral markets."

After this, Sir WILLIAM ERLE enquired:—

"Is there any way of ascertaining, within your cognizance, whether they compete with England in supplying the English market?"

Mr. ROBINSON replied:—

"There have been several cases, and one in particular, which was referred to in Mr. ALLAN'S evidence—the case of SCHNEIDER and Co., of Creusot, who took an order from the Great Eastern Company for 4? locomotives in the year 1865, and they delivered a certain number of these engines, and I believe that those engines were pronounced (in fact, I put it in evidence) to be of a most satisfactory construction, and the workmanship was excellent—in fact, equal to the average of English manufactures. In the specification which was issued by the engineer of the company at that time, Mr. SINCLAIR, and which I have with me, a very large proportion of the materials specified for those engines were to be of the steel of KRUPP, of Essen, of whom you have already heard from Mr. BEYER'S evidence. Mr. ALLAN put it in evidence that he thought a great amount of those engines was made in Yorkshire. Now, what I merely wish to say in reply to his statement is that a large portion of the material was specified by Mr. SINCLAIR to be of this manufacture at Essen; the crank pins, tyres, axles, piston-rods, slide bars, slide spindles, and tender tyres, which are all important parts of an engine, were to be procured from Mr. KRUPP, of Essen. Therefore, neither an Englishman nor a Frenchman had the supply of these, but the contractor, whoever he was, had to go to Mr. KRUPP and buy them from him. And with regard to the boiler plates, which are, perhaps, the most important part of an engine, they were specified to be LOW MOOR, what we know technically as the best Yorkshire iron, but I believe Mr. SCHNEIDER made those boilers from the iron constructed by his own firm; he is an iron maker as well as an engine maker. I merely say this to show those engines were absolutely not made in Yorkshire, but in France, and one of them was exhibited in the year 1867, at the French Exhibition."

Our readers have heard of this last-named transaction before, but we, nevertheless, put it upon record as here, because of the authority whence it comes; and, we must add, that later in the examination Mr. ALLEN, who had in his evidence early in the investigations of the Commissioners given a different feature to it, ventured some explanation which did not materially alter Mr. ROBINSON'S statement. Mr. ROBINSON'S testimony was borne out by the experience of Mr. C. F. BEYER, of the firm of Messrs. BEYER, PEACOCK, and Co., Gorton Foundry, Manchester, where there are nearly as many hands employed as find work at the Atlas.

Over against these facts we have to set the circumstance that the Board of Trade returns show that last year, for instance, some 200,000*l*. worth more of British steam-engines was exported than in the year before, the values in 1866 being 1,700,000*l*., and in 1867, 1,994,000*l*. To this state of things Mr. ROBINSON'S attention was drawn by Mr. HUGHES, and Mr. ROBINSON'S explanation was to the effect that the development of railways which was now taking place in Russia and India might account for that. It might be that not only would the Continent be busy, but this country would be busy too. He considered that at the present moment the position of employment of Europe in his particular trade was exceedingly brisk. In consequence they could now get orders for other countries, such as Russia and Holland. This may be inferred from the particulars furnished by the Government returns for September, before noticed. Therein we are told that the value of the steam-engines exported in September this year was 207,395*l*., against 187,776*l*. in 1867; and that machinery of other sorts was sent out worth 355,048*l*., against 254,227*l*. in the year before. But these last year the British maker could not have taken into competition with the prices which his continental rival would have accepted. That competition has now arrived at this head:—If the British engineer could make an engine for 2000*l*., and the foreigner could make it for 1980*l*., the foreigner would in all probability get the order. Upon that job the British workman would lose, perhaps, 400*l*., which may be set down as the cost in labour of an engine worth the sum named.

For this state of things the British workman has, in a great measure, to thank himself and his Unions. The extent to which he has lately been injured by these combinations will astonish him when he reads the report which the Committee will soon issue. Meanwhile let us call the attention of the ironworks Unionist to some remarks in an article upon the North of England Iron Trade, in another column of this day's Journal, written by a man whose complete knowledge of all that is going on in that industry in the North of England gives much additional force to the statements.

IRON WORKS AND COLLIERY OWNERS.

The explosion of the boiler at the Ystalyfera Iron Works, Swansea, has resulted in a verdict of "Manslaughter" being recorded by a coroner's jury against the men who had the care of the boiler at the time of the occurrence. These were JOHN REED, the engineman, and ROBERT BANDLE, the feeder. Both men have been committed for trial at the Assizes, but have been very properly admitted to bail. Throughout the iron works of the Southern Principality the furnace boilers most in use are of the single-tube construction, like those used in Cornwall, with the boiler behind the furnaces. The boilers are thus outside the works; but these boilers possess the drawback of possessing generally 4-ft. diameter tubes, which Mr. FAIRBAIRN has proved to be unfit to be used at a pressure of from 50 to 60 lbs. In this case the boiler was 23 ft. long by 6 ft. 6 in. diameter; the diameter of the tube was 3 ft. 9 in., and the pressure was from 40 to 50 lbs. It was one of 24 by which steam was furnished to an engine that worked the tin and bar mills of the place, and also pumped the water by which all the boilers were fed from a tank. Two furnaces worked into the tube, the flames of which were kept apart by a brick wall, which was built inside the tube, and ran from end to end of it. From one furnace the flames at the time of the explosion were fiercer than from the other, and on the side of the greater heat the tube collapsed, and both ends were blown out, killing one man and injuring others. Boiler-makers, and J. T. NEWTON, the general manager, all believed that the cause of the accident was over-heating. This rendered the boiler unfit to bear the pressure, and the jury recorded the verdict mentioned, because they believed that by the neglect of REED and BANDLE the water had been allowed to run short; but they recommended that, by the appointment of two feeders, the engineman might be left free to attend to his engine, without the necessity of having also to look after the feed.

The result might not have been different if independent scientific witnesses had been examined, but seeing that so much prominence has recently been directed to the necessity for such testimony in all coroners' enquiries of this class, it is to be regretted that such evidence was not obtained. The trade would then, also, have learnt how great a risk is run when such a partition as that mentioned is built throughout a tube, whose strength so greatly depends upon the preservation of the shape in which it is known to present the largest amount of resistance to pressure.

The colliery boiler explosion to which we last week adverted occurred at the Parkhead Colliery, near Glasgow, the property of Mr. JOHN WATSON, jun. The accident, like that in Wales, occurred in the daytime. Mr. JOHN WILSON, the manager of the colliery, had just gone into the engine-house, and was talking to JOHN PRENTICE, the engineman, when a plate of the boiler blew out: one-half the engine-house was laid in ruins, Mr. WILSON (whose corpse was found in the bed of the boiler) was killed, and PRENTICE was sadly scalded. There was a companion boiler, on the top of which a boy was standing at the time, but, singularly enough, was uninjured. The men in the pit were brought up the 60 fathoms which separated them from the surface by ropes. Mr. WATSON'S was a plain cylindrical boiler, 39 ft. long by 3 ft. diameter, and made of ⅞-in. plates; it was much corroded at the bottom, where in some places it was only 1-16 in. thick, and the piece which blew out and caused the explosion was about 1 ft. square. The corrosion was caused by the leaking of the joints at the bottom; and the supposition is that the leakage was occasioned by the feed being delivered over the hottest part of the boiler, causing undue strain upon the plates and seams. This, it will be remembered, was almost the precise state of things which brought about the explosion of the Moxley boiler; and as that could so this might, in all probability, have been prevented by independent scientific inspection.

That it would be wise of proprietors of iron works and collieries to avail themselves of all such extra means of security may be inferred from the fact that in the past seven weeks four explosions have happened at iron works in this country, causing the death of no fewer than 23 persons; and that in no case was the boiler under independent inspection. We are happy to be able to add that in the case of the most disastrous of these explosions, that at Moxley, Mr. WELLS, the proprietor, is having the furnace-boiler which exploded replaced by one of smaller and, therefore, safer dimensions. Like the last, this will be upon the Rastrick principle. It is further satisfactory that he is also removing an old Galloway, which has been in use for some time at the same works, and is about to lay down in its place a new Galloway, made upon the diagonal seam principle of Messrs. WRIGHT, of the Goscote Works, Walsall, by which it is maintained an additional strength of 40 per cent. is acquired over that obtained from boilers rivetted transversely. Because of the greater freedom from accidents which may thence be anticipated, the public will be glad to know that the use of diagonal-seamed boilers is extending in an encouraging ratio; and it will be interesting to our readers that its most recent application to colliery boilers has been to those to be put up on the distant property of the Vancouver Coal Company.

We are in possession of information as to the Cornish one-tube boiler which blew up on Friday last in Barron's-place, Waterloo-road, London, at the saw-mills of Mr. W. NORRIS; but as the occurrence is still under judicial investigation, we will not now do more here than mention that the tube collapsed from end to end, and forced the boiler backwards through a wall, leading to the inference that the front gave way more than the back.

THE NEW MINING ASSOCIATION.

We are glad to find that the efforts now being made to establish a Mining Association for Yorkshire, having for its object the discussing of all matters relating to the best means for ventilating and working coal mines, are now in a fair way of being accomplished. So far back as 1857 the South Yorkshire viewers formed an association, with Mr. WOODHOUSE as President, the head-quarters being fixed at Barnsley. In July, 1858, the inaugural address was delivered by the President, after which, at wide intervals, a few papers were read. Still, for some two or three years back, we are not aware that any discussions whatever have taken place, so that for all practical purposes the Association might as well have had no existence. The new institution, however, which is now in course of formation, will be much wider in its application than the one at Barnsley, and promises to be of a far more beneficial and practical character. Instead of being confined to colliery viewers, it will include not only them, but also stewards and overmen—all, in fact, who have the management of underground workings. It has long been matter for regret that in Yorkshire, more particularly in the southern part of it, and in which the most fiery collieries in the kingdom are to be found, no institution existed by which the stewards or deputies could obtain any increase of their too limited stock of knowledge as to the best and safest modes of working collieries. That want we are glad to find is now about to be supplied by the new association, and which cannot fail to stimulate a desire for improvement amongst a large number of those who wish to force their way upwards, and who, having commenced at the lowest round of the ladder, aspire to reaching the topmost one. It is a fact that in Yorkshire there are a good many men now holding the responsible position of viewers—and several of whom were present at the meeting, at Wakefield, on Saturday last—who commenced life in the pit as trapper-boys, and at a time when education was far more difficult to be obtained than at present. Having known the loss of even the schooling which the pit lads of the present day are compelled to have given them, they are desirous of assisting in making the knowledge obtained by the experience of years available to those at present engaged in mining operations, and who, by their energy and wish for the means of improvement, aspire to similar positions.

From the numerous promises of support assured to the new association, it appears likely to become one of the most important in the kingdom; and should it, as proposed by Mr. P. COOPER, take in the entire coal field, as far as Nottingham, and become a Midland institution, we fully believe it will be much better appreciated than if confined to Yorkshire. It may be stated that the principal seam of coal worked in Yorkshire is that known as the Barnsley bed, and commences quite close to the town of Nottingham, proceeding from thence through Derbyshire into South Yorkshire, and on to Normanton and Wakefield. In the adjoining county of Leicester, also, there are a few collieries, but they are the largest in the kingdom, raising, on an average, yearly 104,545 tons each, whilst the highest average in any of the Yorkshire districts is only 34,399 tons, Normanton and Leeds being as low as 19,517 tons. With those facts in view, the larger the field embraced by the association the more successful we believe it will be, not only in a pecuniary, but in a truly useful, practical, and even in a semi-educational point of view. We shall, therefore, look forward to the establishment of the association, and the progress it makes, with no little interest, knowing from experience that such institutes, if properly and efficiently managed, are capable of doing a vast amount of good to those engaged in such a dangerous profession as coal mining, and especially in a district notorious for the fiery character of its mines, and the terrible fatalities of which it has been the scene. We are also confident, from the known character of several of the men who have taken the matter in hand, that the movement will not suffer from want of energy or a desire to promote the interests of those on whom devolves the onerous duty of superintending the working of our coal mines.

METROPOLITAN GAS SUPPLY.

The amusing absurdities resulting from the neglect of the salutary maxim that "the cobbler should not go beyond his last" are very numerous, yet the proposition to supply London with gas manufactured at Newcastle probably surpasses most of them. The proposition is one which has been, from time to time, brought forward almost from the first introduction of gas-lighting at the beginning of the century; but as it invariably emanates from those who have no practical acquaintance with the subject, and will not trouble themselves to ascertain the experience of others, their suggestions might be permitted to pass unnoticed, but for the unfortunate circumstance that those are permitted to legislate who are utterly ignorant of the subject to which their legislation is directed. It is stated that the Metropolitan Board of Works has again had the question of the removal of gas manufactories "from the populous districts of the metropolis" brought under its consideration; and, in connection with that circumstance, some would-be *savant* laments that the proposition for a remedy "to the present dangerous and preposterous system of making gas in the most crowded parts of the richest city in the world" should be limited to removing the factories "into the country," and conveying the product by a few miles of piping to the consumer. This authority writes that he really cannot understand why our gas should not be made at the mouths of the coal pits that supply the material, which, by a costly and tedious process, is at present brought to London by rail or sea, the freight being not less, probably, than 10s. per ton between the pits and the factories, all of which the consumer pays, besides being injured in health and endangered in person by means of the manufacture taking place in that which is the worst possible spot in the world for the purpose. The cost of laying down gas-mains between London and (say) Newcastle would not be greater than the maintenance for a short period of the fleet of colliers which bears the crude material to London, where wages, living, and land are more costly than anywhere else.

In the celebrated DOULTON trial, recently concluded at Brussels, one of the interested parties explained that his reason for making

certain demands, which the Court considered exorbitant, seeing that the services rendered were of an imaginary character, was that "he always understood that the English were very eccentric in money matters," and certainly the recognition of such schemes as that referred to would be admissible as conclusive evidence of the accuracy of that opinion. The whole of the arguments adduced are entirely fallacious, and display the utmost disregard for every essential fact. The make of gas in the metropolis at present far exceeds eight million thousands of cubic feet per annum, which in round numbers requires the consumption of 1,000,000 tons of coal, and involves an outlay by the gas manufacturers, for raw material, wear and tear of plant, and labour, of about 1,000,000*l.* But of the eight million thousands manufactured not more than six million thousands reach the consumer, one-fourth of all the gas made being lost by condensation, leakage, &c., so that the companies (taking the average at 4s. per thousand) only receive 1,200,000*l.* for their annual make. Now if the loss in delivering even from the works to the consumers in the same district is equal to 25 per cent., it can readily be imagined that the attempt to convey gas to London from even the nearest coal field would be attended with so serious a loss that we might be deprived of the advantages of our gas supply altogether, unless we consented to a considerable advance in the price of gas. But the actual loss of gas is not the sole objection to its manufacture at a distance from the place of consumption; the mere cost of overcoming the friction resulting from the passage of the gas through the pipes, so as to maintain the requisite pressure at the burners, would vastly exceed the cost of conveying the coal the same distance; the cost of keeping the extra pipes in repair would exceed the total cost of making the gas, even in London; and a comparatively trifling injury to the provincial main might leave the city in darkness for an inconvenient period. With regard to the injury to health asserted to be attendant upon the manufacture of gas, it certainly has not been proved, nor is it likely to be proved, that the odour which escapes from gas works is in any degree unwholesome, although it is beyond question very unpleasant.

THE VENTILATION OF COLLIERIES—IMPORTANT DECISION.—In another column will be found a case under the Mines Inspection Act, which may be said to be one of the most important judicial decisions yet delivered as regards the working of collieries. The great majority of the terrible explosions that have occurred within the last few years have been, as a rule, attributed to one of two causes—either a sudden emission of gas from old workings, or the recklessness of workmen in taking naked lights to places where gas was known to have accumulated. In the case under notice, it was agreed that a boy had brought about the explosion by going with his light inside a disused working place, and the question arose whether the proprietors were required to ventilate places that had been fenced off, or in reality were old workings. This has been a contention for years between the Government Inspectors and colliery managers, and much credit is due to Mr. BROUGH for having persevered to obtain at last an authoritative decision upon the point. Lord Chief Justice COCKBURN says, "It is not enough to ventilate the working place, but so much of the mine also as is necessary to the safety of the working place." Justice BLACKBURN says, "It is not sufficient and adequate ventilation in words, as the justices (the magistrates) seem to have thought, only that they shall ventilate the working and travelling places, but it is that they shall ventilate the mines in such a manner that the working places and the travelling places shall be safe on any occasion." The effect of this decision is that old workings must not merely be fenced off, and be the depositories of vast accumulations of gas, which may at any moment escape in large quantities to the working parts or roads, but the old workings or goafs themselves must be sufficiently ventilated to secure the safety of the mine. Colliery proprietors and managers will do well to take heed of the decision, for there is now no doubt upon a point long the subject matter of controversy, the first judges of the land having given an authoritative opinion, and the magistrates in the various districts will in future have to be guided by this opinion in deciding cases brought before them.

SAFETY APPARATUS FOR MINE CAGES.—According to the invention of Mr. J. P. HARPER, of Derby, provisionally specified, but not patented, in March, 1867, the descent of the cage is prevented in the event of the rope breaking. The apparatus is self-acting, and very simple and inexpensive in its construction. When brought into play on the severance of the winding-rope from the cage, or lift, its operation is, of its own accord, to bring the cage, or lift, to an immediate stand, and hold or suspend it by means of catches, which grip and fasten upon the conductors until the re-adjustment of the winding-rope, upon which the apparatus spontaneously releases its grasp of the conductors, and the whole is again in working order. He effects this object by means of catches or compressors of peculiar construction, made (in plan) in a fork-like shape, and of any proportionate elevational depth, which work on each side of the conductors on axles attached to the cage or lift, and when not in play are held on each side of the conductors at an acute angle, and when brought into play, as presently explained, slide into one another and enclose the conductors, assuming a nearly horizontal position, and forming (both in plan and elevation) a circular hole, less in diameter than the conductor, so that as the angle increases so will the compression likewise increase on the conductor, in proportion to what may be the weight of the cage or lift. The catches are constructed with lever ends, and when the cage or litt hangs freely on the winding-rope they are held apart from the conductors by side rods attached on each side of the cage or lift to main, vertical, and shouldered rods, working through guide-boxes, in each of which are inserted spiral springs bearing on the shoulders of the main vertical rods, which main vertical rods are connected on each side of the cage or lift by a cross-bar, working over the top or cover of the cage or lift and attached to the winding-rope. On the winding-rope breaking or becoming disconnected from the cage or lift the spiral springs hitherto held in subjection are released, and assist in bringing the catches into instantaneous play, which then, sliding into one another, so grip, fasten on, and compress the conductors, that the cage or lift is brought to an immediate stand.

GOLD AND SILVER AMALGAMATION.—The machine which gave the very satisfactory results referred to by Mr. W. T. Rickard, F.C.S., in the Supplement to last week's Journal, is understood to be the invention of Mr. LEONARD WRAY, of Eagle Lodge, Ramsgate, who states that in the case in question his machine extracted 3 ozs. 18 dwts. per ton from ore the total contents of which was 4 ozs. 1 dwt. 16 grs. of gold. As the experiments described were made under the immediated superintendence of Mr. Wray himself, with slimes brought from Nevada by Mr. Rickard, and with ore stuff brought from Nicaragua by Mr. Paul, late mining captain on the Chontales Gold Mine, Mr. Wray feels somewhat aggrieved that Mr. Rickard should have taken advantage of a private experiment to discover defects and patent improvements upon the original invention, and thus deprive the original inventor of the honour attaching to it. Mr. Wray's patent, however, was applied for on July 25, whilst that of Mr. Rickard is dated Oct. 17. It will be interesting to learn the exact details of each invention, in order to ascertain whether the improvements really constitute a new invention.

CONSUMPTION OF SMOKE.—A simple and efficient arrangement for the prevention of smoke is being introduced extensively by the Manchester Association for the Consumption of Smoke. It is merely necessary to remove bars or grates that will not burn smoke, and replace them by the improved bars, which will do all they do, and burn smoke into the bargain. All that is required is contained within the flue, and, in the case of a 30-feet boiler, takes up less than 7 feet from the door of the furnace. The inventors state that they make a peculiar form of longitudinal bars (hollow), each of which, when in action, delivers into a chamber a continuous and strong current of heated air, making together an elaborate, uniform, and powerful stream of oxygen. The flame and smoke have to pass through this, which comes from below, and acting on the flame like a concentration of about 24 blow-pipes. The smoke is burnt instanter, and that, too, before it can get 6 inches away from the fuel. All the ironwork is placed out of the reach of the concentrated action of the bars and, consequent, intensified flame while burning the smoke, so that renewals of any portion even of the ironwork are rarely necessary; in short, the smoke thus thoroughly consumed is at once utilised, and plays an important part in the raising of steam. The saving of coal goes much further, our estimate for a 40-horse power boiler being, on an average, not less than 60 tons per annum. The saving, however, may be accounted for by the improved draught the apparatus always gives, absence of waste, and economy in the thorough consumption in coal of all matter that is in reality combustible. In conclusion, the consumption of smoke in their hands is always both simple and certain; in fact, a simple operation indeed.

A NEW EXPLOSIVE.—The artificial saffron invented by Mr. Mittensweg, of Pöblitz, near Zwickau, and specially intended for tinging vermicelli, has proved to be explosive—a box of the compound having exploded by a spark from a pipe whilst it was being opened. Mr. Chevallier, of the Société d'Encouragement, has been unable by analysis to discover its composition. The substance ignites as readily as gunpowder, but its force of projection is 40 per cent. less.

ADAPTABILITY OF SLATE.—A house has recently been built at Brownsville, Maine, U.S., which is not only shingled, but is clapboarded with slate. It is a *slate edifice*—fire-proof, and indestructible. The slates are put on to the boarding of the walls with only paper between. They are in the form of segments of a circle, overlapping each other, and have a very ornamental effect. The natural colour of the slate is pleasing to the eye, and no paint is needed. If it were the slate would furnish it, for when ground it makes an excellent paint, which has been used on a barn with good effect. The whole establishment is elegant in appearance, and shows what can be done with native materials. The front steps are of beautiful slabs of slate; the sinks, mantels, and shelves are of slate; the woodwork is brown ash, a native wood, which makes a handsome finish. In short, this is a real State-of-Maine house, and shows the wealth of her resources. The slate costs little, if any, more than clapboards. When this material can be economically brought to us slate houses will become fashionable.

THE EXPORT COAL TRADE.—The exports of coal from the United Kingdom show a slight check, having amounted in September to 998,303 tons, as compared with 1,097,508 tons in September, 1867, and 896,150 tons in Sept., 1866. The exports to France declined in September to 155,097 tons, against 164,056 tons in Sept., 1867, and 139,303 tons in Sept., 1866. In the nine months ending Sept. 30 this year the exports attained an aggregate of 8,301.286 tons, as compared with 7,812,947 tons in the corresponding period of 1867, and 7,586,499 tons in the corresponding period of 1866. In these totals the exports to France figured for 1,436,479 tons, as compared with 1,560,048 tons in the corresponding period of 1867, and 1,381,796 tons in the corresponding period of 1866. The exports increased this year to Russia, Sweden, Denmark, Prussia, the Hanse Towns, Italy, and Brazil, but they declined to Holland, France, Spain, the United States, and British India. The value of the coal exported in September was 485,519*l.*, as compared with 564,477*l.* in Sept., 1867, and 462,985*l.* in Sept., 1866; and in the nine months ending Sept. 30 this year 4,096,326*l.*, as compared with 4,034,152*l.* in the corresponding nine months of 1867, and 3,858,640*l.* in the corresponding nine months of 1866.

OUR COAL SUPPLY.—The great northern coal field extends from the Tees on the south to the Coquet on the north, a distance of nearly 50 miles, and its total area may be calculated at 750 square miles, containing in round numbers coal workable to the extent of 8,000,000.000 tons, out of a national stock estimated on the lowest computation at fully 83,544,000,000 tons.

THE ELECTIONS.—We make a final appeal to all electors who are connected with the iron or mining trades of this country to regard, in the elections at which we have now so nearly arrived, the paramount importance of all candidates, whatever their political party, who are themselves members of either of these branches of our national industries. If any additional argument is needed to show the need of such action, it will be found in the article in another column of this day's Journal on "Our Competitors."

THE FORTHCOMING ELECTIONS.—Mr. C. B. King, C.E., whose address to the electors of the Borough of Derby was noticed in the *Mining Journal* a few weeks since, has commenced his personal canvass. Mr. King is "thoroughly impressed with the necessity of Conservatism under a monarchical form of Government, because it is necessary to uphold the Constitution in its entirety, and all those institutions which make up the aggregate of what may be termed the Constitution under which we have had the happiness of living many years past, and through which we derive that civil, political, and religious liberty which makes our country so respected amongst the nations of the world." From Mr. King's acquaintance with the engineering and iron trades, he could, no doubt, render considerable service to the borough, if returned. His opponents are Messrs. Bass, M.P., and Plimsoll in the Liberal interest, and Mr. W. T. Cox, M.P., Conservative, so that a considerable amount of honour would attend the achievement of success.

REPORT FROM SCOTLAND.

NOV. 4.—"Lobsters swim by jerks," and during the last few weeks the motion in the price of Pig-Iron has been by a succession of jerks, not quite so natural nor so intelligible as those of the pronged crustacean. The business now being done is said to be principally of a speculative nature with Liverpool firms, a number of our English friends having got open contracts for forward delivery; but it not unfrequently happens that a good portion of iron bought in this way is re-purchased by Glasgow merchants, before being delivered, at a decline. Last week closed with a firm but quiet market, at 52s. 10½d. prompt cash; but on Monday prices were easier, and 52s. 9d. was the closing cash quotation. Yesterday, market as on previous day, but prices a shade better. To-day not much change; fully 5000 tons done at 52s. 10½d. cash, and 53s. a month. At the close there were sellers over, and buyers at 53s. a month. No. 1, g.m.b., 53s. 3d.; No. 3, 57s.; Coltness, 58s.; Gartsherrie, 57s.; Glengarnock, 56s.; Langloan, 54s., for No. 1. The shipments for the week just closed are 1000 tons better than they were in the corresponding week of 1867, but they are still limited, and only amount to 10,265 tons, against 9275 tons in the same week of last year. Middlesborough iron is increasing here, and has now reached 84,845 tons, against the diminished total of 42,615 tons at the same period of 1867, showing a difference of 42,220 tons in favour of this year. During the month of October the stocks of pig-iron in store increased 5165 tons, and are now 258,128 tons, against which there are warrants in circulation for 241,500 tons, leaving a margin of 16,628 tons. The average price of pigs in October was 53s., as compared with 55s. in October of last year, but the miners' wages were 6d. per day lower this year than last. Hematite has been found on the farm of Greensland, Lanarkshire, of fine quality, judging from the specimen.

Manufactured iron keeps pretty steady in demand, and although there is by no means a plethora of orders contracts come dropping in as the others are being wrought up, and thus most makers are kept going from week to week. There is also a tendency at this period of the year to seek to secure a little quiet, to assist stock-taking; but, unfortunately, makers have had too much of lull during the year to ardently desire its extension. The improvement gained a few weeks ago is still being paid, so that rates remain as last quoted. Through the short months of the year ship iron is in sluggish demand, even when shipbuilding is busy, on account of the broken and short work days; but makers of angle iron keep well employed, and when longer days return the shipbuilding on the Clyde must consume more than an average quantity of iron. Ironfounders are quiet, with the exception of pipe makers, who are moderately busy.

Although the quotations for Coals are firmer than they have been for a few months, the demand is not equal to an average, and not a 6d. of an advance has been gained over the rates of June. The whole of the steam coasting trade has been suspended, locomotive consumption has been reduced to a minimum, and, with no prospect of a rise in price, the coalmasters have very generally been compelled to advance the wages of their miners to 4s. 6d. a day of eight hours, which is equal to 5s. 4d. a day of ten hours. The ironmasters have not yet said what they would do, but there is every likelihood that they will also grant the advance, which will increase their miners' wages to 4s. a-day—a 6d. a-day less than that paid by the sale coalmasters. At the Havre International Exhibition the Bairds of Gartsherrie took a silver medal for coal.

Shipbuilding is quieter on the Clyde, owing to the exposed nature of the occupation, and the inability of workmen to withstand the inclemency of the weather, otherwise all the yards would be full of life. Last week a screw-steamer, of 800 tons and 128-horse power, was launched for a Marseilles company, named the Shuera. Later a large screw-steamer, of 272 feet by 31½ feet, and 20 feet deep, was launched for Michael Spartali, London, named the Theoff. At the Havre Maritime Exhibition our Scotch shipbuilders took the following honours in class I.:—*Diplôme d'Honneur*—Napier and Sons, Glasgow, models of vessels. *Silver Medals*—Henderson, Coulburn, and Co., Renfrew, models of vessels; Birnie and Co., Montrose, models of vessels. *Bronze Medals*—T. Wishart, Largs, models of vessels; S. and H. Morton, Leith, ship's cradle.

At the eleventh hour the Right Hon. E. Horsman, of "Cave" notoriety, has been brought forward to contest the Falkirk burghs with Mr. James Merry. What special claim Mr. Horsman has on the burghs is not in anyway indicated; and beyond the fact that some "wee lardies" in the district of burghs have taken a notion that they must be represented by a "British legislator," there is nothing to warrant the step. Of the same political creed, Mr. Merry has a local knowledge and a local connection, of which the other cannot boast, and which points him out as the more useful member of the two, and one who is likely to benefit more generally the great mass of the electors. There are good hopes entertained of Mr. Merry's success, notwithstanding the lingual powers of his southern foe.

At the Crofthead Thread Works an entertainment was given to celebrate the start of the fine powerful new engines, at which Mr. Jas. Wright, manager of the mill, had the honour to preside, and on the platform were Mr. William Wilson, Lilybank (the successful contractor for the numerous steam-boilers); Mr. Turnbull, sen., the active head of the engineering firm, Canal Basin Foundry, Glasgow; Mr. Peter Rodie, Barrhead; Mr. Robert Wallace, Neilston; Mr. Andrew Shanks, Barrhead; Mr. A. R. Ferguson, writer, Neilston; Mr. Macduff, manager of the Canal Basin Froundry, &c. After the entertainment, Mr. Wilson, of Lilly, said that in these days of strikes and dissensions among workpeople there are few sights so pleasing as seeing employer and employed meeting together in this manner, and in holiday attire, around the social board, partaking together of "The cup that cheers, and not inebriates," interchanging, as it were, kind looks, kind smiles, kind words, and kind wishes for each others welfare and happiness. Speaking of the engines, he said—"I feel pleased that they are yours. They are the handsomest, most substantial, and newest of their kind, a credit to my skilled friend, Mr. Turnbull, and the firm he represents. I am sure our friend, Matthew, the engineman, is very proud of his new charge, and I have no doubt he will be very kind and careful with them. As for your range of new steam-boilers, it does not become me, the maker of them, to say anything in their praise. They, however, do not need it, they can speak for themselves; I am glad they have got such a spacious and comfortable house erected over them. It is the finest boiler-house to be seen anywhere; and now that you have so successfully 'got up the steam,' I trust you may have flowing on you such continued waves of prosperity that will enable you always cheerily to 'keep up the steam;' and remember that it still lies with you, by care and attention to the work passing through your hands, to maintain and keep up the good name and fame of 'Alexander's Thread.'"

REPORT FROM NORTHUMBERLAND AND DURHAM.

NOV. 5.—The Steam Coal Trade continues very dull in Northumberland, so much so that a reduction in the output is pretty generally resorted to, and some of the collieries are worked only half time, and some even less than that. But other measures are also talked of—that is, the actual stoppage of some of the works, and it is to be feared that this extreme course will have to be resorted to in the end. In Durham some branches of the trade are a little better than the steam coal trade—that is, the gas and house coal works, many of these being tolerably well off for orders. Active preparations are making for the sinking of the shafts at the Silksworth new winning, near Sunderland; a winding-engine is nearly ready for the work, and other erections are in progress. The Iron Trade continues flat, with little spirit, and no change in the rate of prices; with respect to the general engine building trade, it is very dull, and makers generally have but few orders on their books. Shipbuilding is tolerably steady, as also the Chemical and Alkali Trades.

At the North of England Institute of Mining Engineers meeting, on Saturday, the secretary will report the proceedings of the council, and several new members will be elected. Mr. George Elliot, the newly-elected President, will deliver his inaugural address, and the smoke committee will present their report. A full report of the proceedings will be given in next week's Journal.

Some improvements have been effected in the engine at the Harry Pit of the Eldon Colliery. The men, on Wednesday and Thursday last, brought to bank 2508 tons 11 cwts. of coals for the two days, the average working time of each day being only 10 hours 40 minutes. In celebration of this extraordinary feat of workmanship, Mr. Hall, resident viewer of the colliery, at the instance of the manager, Mr. J. Johnson, provided an excellent supper at the house of Mr. Wm. Metcalf, South Durham Inn, when upwards of 60 workmen were present. After supper Mr. Hall delivered a short address to the deputies and other officials, urging them to have a due care in their respective charges in the protection of life and limb. Although he was proud of their achievements, yet he was prouded still to think that the two days of trial had passed away without one single mishap to either limb or property. The toast of the evening, "The health of the South Durham Coal Company, coupled with the health of Mr. J. Johnson, of Chilton Hall," was drunk with much enthusiasm.

Although the main features of the different classes of steam engines were pretty well defined years ago, improvements in the details and working parts continue to be discovered and adopted from time to time. The locomotive engine of Mr. Kendal, of the Blyth and Tyne Railway, is now nearly completed, so that we may expect to hear of its trial very shortly. It will be recollected that this engine is constructed with three cylinders instead of two, as in the ordinary mode of construction, and many advantages are expected to be derived from this innovation. A new kind of piston packing for locomotives has lately come into use on the North-Eastern Railway, which possesses many important advantages. It is both simple and effective, and consists of cast-iron rings or hoops, which are fitted on to the piston, and these rings from a surface which works on the inside of the cylinder, and is perfectly steam tight. It is quite evident from the working of a locomotive fitted with this packing that it is superior to any hitherto tried. The load is started much easier, and when the train has to be brought to a stand the steam must be shut off much sooner than formerly. As we have said, the piston appears to be perfectly steam tight, such is the precision with which the load is started the full benefit of the steam is evidently got. From the experiments which have been conducted for a length of time, and the tabulated results, it appears, that taking the quantity of fuel consumed with a given engine and load attached, the quantity of coke consumed is in the instance alluded to 29 lbs. per mile with pistons of the old construction, and 23 lbs. per mile packed with the cast-iron packing, so that there is a saving effected in coke of 20 per cent.

A new winding-engine, supplied by Black, Hawthorn, and Co., of Gateshead, to the Earl of Durham, was tried at Houghton-le-Spring Colliery, and proved satisfactory to the highest degree. Mr. H. T. Morton and Mr. Leishman, the viewer, expressing very favourable opinions on its performances. It is to be employed (says the *Gateshead Observer*) in drawing coals from the new shaft, and is on the horizontal principle, with cylinders 34 in. diameter and 6 ft. stroke. The valves are Messrs. Black, Hawthorn, and Co.'s patent, which they fitted with so much success to the Usworth and other engines. The engine went admirably, the monster machine being reversed by simply moving one handle. The large trellised framework which supports the pulley frames was made by Messrs. Joicey, of the Forth Bank Works, Newcastle, and is of much the same design as that introduced by Messrs. Black, Hawthorn, and Co., and first erected by them at Usworth Colliery. The rope roll is also on an improved principle, whereby the ascending and descending cages are made to compensate one another in a great measure. It is calculated that the engine when in full work will draw about 1500 tons of coal per diem. We are given to understand that Messrs. Black, Hawthorn, and Co. are about to supply an engine of similar construction to Thornley Colliery, and are glad to record the success which has heretofore attended them.

THE REPRESENTATION OF NORTH DURHAM, GATESHEAD, AND SOUTH SHIELDS.—The contests for parliamentary honours now raging in these districts have not been equalled within the memory of the present generation. Some, indeed, of the old inhabitants talk of the great election in 1826, when the polling was continued at Alnwick for a period of three weeks, and fabulous sums were spent in the contest. Mr. George Elliot is now pretty freely backed to head the poll in North Durham, and if Mr Bell should be his colleague, which is most probable, certainly it would be difficult to point out two men more suitable to represent the great iron and coal district of North Durham. They are both practically acquainted with and largely interested in iron works and collieries, and Mr. Bell is also largely interested in chemical works. They are also both men of great scientific attainments, and in every way fitted for the honourable and responsible position. Against Sir H. Williamson nothing can be said personally. He is a most genial gentleman, and a liberal in the widest sense in politics, but the other two gentlemen are, all things considered, most suitable for the position they aim at; and, although

the contest will be very keen and close, yet there is little doubt that Mr. I. L. Bell and Mr. George Elliot will be the successful candidates. At South Shields a keen contest is also to take place, and it would be presumptuous to prognosticate as to the result there, the two parties appear to be so nearly balanced; but Mr. Palmer is eminently fitted for the position, and he is more largely interested in the coal, iron, shipbuilding, and general trades of the North than his opponent, although the latter gentleman, Mr. Stephenson, is much respected in his sphere. He is a large chemical manufacturer. With respect to Gateshead and Newcastle, contests have taken place only lately, and were most unexpected. In Gateshead Sir Wm. Hutt will be opposed by Mr. Arbuthnot. Sir Wm. Hutt is interested in the coal and shipping trade, and has been member for the borough no less than 25 years. He is highly respected, and will certainly be returned in spite of the factious opposition he has met with from Mr. Arbuthnot, who professes to be a Liberal, but to go a *little further* than Sir Wm Hutt. He is, indeed (that is the new candidate), prepared to promise almost anything, whatever his performances may be if he should at any time succeed in getting into Parliament, which, however, he is not likely to do at present. Mr. Arbuthnot is understood to be connected with a large India house, and he has lately purchased an estate in South Durham. But the most remarkable circumstance connected with his introduction into Gateshead is this. He states that he was asked to contest the borough, and that a requisition was sent to him by certain influential electors, but this document cannot be found, and he refuses positively to produce it. It cannot, therefore, be wondered at that its existence is doubted by many parties. With respect to Newcastle, the two Liberal candidates are joined in the race by Mr. Hamond, who has been generally considered a Tory, but he has on this occasion hoisted such a strange and parti-coloured flag, that both old birds and young are more frighted than attracted by it. It is hardly likely that he will succeed, although he may possibly poll a considerable number of voters.

THE NORTH OF ENGLAND IRON TRADE.—At the date of the last Quarterly Meeting of the Northern Iron Trade, held at Newcastle, it was generally expected that the merchant iron trade would soon afterwards experience a relapse, as it was well known that the majority of railmakers had got nearly to the end of their Russian contracts, and enquiries for home and American account were not so numerous or so encouraging as could be desired. Considerable pressure was then being exercised in completing the Baltic orders, so as to save the present navigation season; and thus most mills had been kept running more fully than they would have been in case the question of time had not been of so much consequence in the execution of the work on hand. But as the quarter wore on a fair sprinkling of orders began to drop in. Some railmakers secured contracts for lines in southern Russia, and this delivery is not affected so much by the weather, though, of course, freights are higher in winter. The home railways have ordered a little more freely of late. Several contracts have been given out for Hungarian and other foreign lines, and so, on the whole, the rail mills have been kept in nearly regular operation. Whether the orders will be sufficient to tide the district over the dull season remains to be seen; but this, at all events, is satisfactory, the amount of work now being turned out is far greater than it was a year ago, when, it will be remembered, things were so slack that a reduction in wages had to be made. Rail makers here still complain that, despite all their efforts, the continental firms continue to carry off order after order, and at prices very little below those at which English houses tender; and, indeed, many firms would be quite willing to undertake the orders at the prices which are taken by the Belgian and French houses, provided they could have a guarantee that the men would work out the contracts at the existing rate of wages. It is this uncertainty as to the labour question which is driving away thousands of tons of work at the present time, and we are thus reaping the effects of the serious disturbances and complications of years past. The continental maker, when he is going into a contract, puts his wages down at a settled sum, which he has no fear of being altered. He then can calculate the cost of labour per ton with as much certainty as he can his coal or pig-iron, but in this country this is not the case. The manufacturer contracts over a year or two for the delivery of coal. He probably has arrangements by which his cost of pig-iron would not vary much for a considerable period; but his wages are exceedingly uncertain. He fears from past experience that if he were to take a large order, and were to put his wages rather close to get it, that his men would not be unlikely to turn round upon him and demand an advance of wages, in which case even a 10 per cent. advance on an order of (say) 20,000 tons would mean a difference of from 4000*l.* to 500*l.*—far more than almost any manufacturer would care to risk in these times. He has, accordingly, to add a percentage to his price, in order to allow for contingencies, and the result is that this margin prevents his getting the work, and the orders go to the continental firms. This is only a plain statement of fact, which the men themselves could easily verify if they were to take the trouble; but it is a state of things very harrassing to the employer, and also very unfavourable to the men themselves, as they are in this manner kept on comparatively short commons, whilst their foreign neighbours are fully occupied. The shipbuilding yards of the Tyne and Tees have been tolerably well off for work of late, several large vessels having been completed. They are still well supplied with orders, so that the plate and angle iron mills are kept fully going, but it is not possible to obtain much alteration in prices, except for special lots when the quotations are a trifle firmer. A good deal of plate iron is now going to the Clyde, where shipbuilding is brisk. The engineering establishments are steadily occupied, but are not turning out nearly as much work as they are capable of doing if they only had orders. Bar-Iron is rather quiet. Several makers have a tolerable amount of work on hand, but others complain that they have not enough to keep their mills going. In the Tyne district some of the mills are not making full time.

The Cleveland iron trade has been, on the whole, a trifle stronger since Quarter-day. It was then found that makers generally were well sold for the quarter, and hence prices have gradually got stiffer for next year's delivery. The principal makers are not booking orders at anything under current quotations, which were a month ago rather above the price at which most people were selling. There is no disposition shown, on the part of masters, to enter into contracts for delivering over long periods of next year, as an impression prevails that trade will be decidedly firmer before that time. It is satisfactory to find that although stocks are accumulating in Scotland they are decreasing here, both at the warrant stores and also in makers' hands. This tends to give increased firmness to the trade. The Middlesborough iron market, on Tuesday, was well attended, and more animation was shown than had been the case for some time past. A good deal of iron changed hands at—No. 1, 46s.; No. 3, 42s. 6d.; No. 4, 41s. 6d., net cash. Shipments, both foreign and coastwise, are going on steadily, particularly to the Glasgow market. The decision of the North-Eastern shareholders to sanction the expenditure of a large sum of money in improving the Middlesborough Dock has given much satisfaction to the trade of Cleveland, for the want of proper dock accommodation has of late been a very serious obstacle to the proper development of the shipping trade in iron.—*Birmingham Daily Post.*

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

NOV. 5.—The accounts of the state of the Iron Trade in North and South Staffordshire are satisfactory. It was feared that as shipments for the Northern ports were completed a want of orders would be felt, but so far the works keep about as well employed as they were, by a demand from various sources, and for different kinds of iron. Pig-iron is rather firmer in price, but so far very few of the blast-furnaces which have been blown out have been re-lighted.

A writer on the Iron Trade, in the Cleveland district, in the *Birmingham Daily Post*, observes with considerable truth that the uncertainty which attaches to the future rate of wages prevents many large orders for iron coming to this country. He observes that home makers in tendering for contracts are obliged to have a margin for a possible advance in the rate of wages, which in many cases causes orders to go to continental houses. There is much truth in this remark, nothing is more necessary to prosperity in trade than confidence in fixed data. It would be a great gain if there could be an understanding between men and masters that wages should be fixed for a year at a certain season—say in the spring—so that manufacturers could look forward for at least a year to producing at a certain cost.

A dispute of a serious character occurred on Tuesday between the workmen at that part of the Patent Shaft and Axle-Tree Company's Works which formerly belonged to Messrs. Lloyds, Fosters, and Co. It arose from new rules put forth, which were applicable to the boiler makers, but which the men thought would, if permitted, be extended to all departments. After a meeting at dinner time on Tuesday they ceased work at once, a step for which they afterwards expressed regret. They sent a deputation to Mr. Sampson Lloyd, who saw his son, and received a conciliatory reply. Another meeting was held, and another deputation sent, who waited on Mr. Lloyd to-day. The main objections taken were to the rules about payment for piecework, especially one, according to which only day wages were to be paid until a particular contract was finished, which, it was said, might be six months; and another, which laid down that "Any person engaging to do piecework, and doing it in an unsound, unworkman-like, or scamping manner will be instantly dismissed, and no alleged balance will be paid to him on any pretence whatever." This morning the deputation waited on Mr. Sampson Lloyd, Mr. R. Williams, Mr. Z. Lloyd, and Mr. Braithwaite. The deputation were asked to speak their minds without any reserve, or any apprehension of consequences; and, after they had done so, it was agreed to withdraw the rules, which it seemed had been issued without the sanction of the principal manager or of the directors. The men were invited to meet the managers, for the purpose of drawing up a fresh set of rules, and it was agreed, and a large meeting ratified the decision, that the men should return to work the next morning.

Last week it was noticed that a Mr. Robert Hartwell, who it seems is a compositor, and active in connection with Trades Unions, is offering himself for the Staffordshire Potteries, to displace Mr. Roden, managing partner in the great iron works of Earl Granville, in that district. Mr. Hartwell charged Mr. Roden with having, after the last strike in the iron trade in North Staffordshire, dismissed 23 of the leaders in that struggle; and, further, with having taken steps, by circulating reports about them, which had prevented them getting employment elsewhere. On Tuesday evening Mr. Roden defended himself from this charge, before a meeting of 5000 or 6000 persons, in the Market Hall, Longton, nearly all of whom were working men, and Longton being far from Mr. Roden's works. Complete contradictions of Mr. Hartwell's statements had been published in the papers, and Mr. Roden asked whether the meeting would believe a man being for years amongst them, employing 3000 persons, and paying 150,000*l.* a year in wages. After absolutely denying that he ever did anything to prevent a man getting employed elsewhere, Mr. Roden said:—

He believed that in support of this extraordinary and monstrous charge they said that one Peter Baker was one of his victims. That was another wicked lie for he had never employed Peter Baker in his life. He did not think it worth while to go through the list of the 23 men who, it was said, were victims to his tyranny, because they had seen quite enough in the papers to show the falsehood of the charge, but he would take the case of one of those men—Robert Livingstone, whom he was charged with having sent barefoot through the country with his wife and children. Now, he held in his hand a letter which he received from Mr. Livingstone on last Sunday. In that letter the writer said that, hearing Mr. Hartwell was reflecting upon his character as an employer, especially in connection with the last great strike, he had deemed it his duty to say that he had worked for Mr. Roden for nine years, that he was always treated with kindness, and that he did not leave his employment until the termination of the strike. In company with several of his fellow-countrymen he then went to Scotland, and a character which Mr. Roden's forge manager gave him materially assisted him in procuring his present situation as forge manager to the Monckiln Iron Works. He added that he was one of a deputation appointed to confer with Mr. Roden during the strike, and that he was always treated with civility. Mr. Roden said, in continuation, that nearly one-half of the men on the fictitious "black list" were now in his employ, and five of them were supporting him on that platform.

This seems to snuff out Mr. Hartwell pretty completely.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

NOV. 5.—During the week there has been no alteration in the state of either the Coal or Iron Trades of Derbyshire calling for comment. The demand for manufactured iron remains tolerably good, and much better than it was a few months ago. The activity of last week, so far as regards the export of coal to London and the South, has been fully maintained, and is likely to continue during the winter months. Gas coal is also in good request for Birmingham and the Midland Counties, whilst from the southern part of the country rather more is doing with the West, by way of Bromsgrove and Worcester. Sinking operations are being carried out in the northern part of the country to a considerable extent, whilst several new coal fields are being treated for with a view to opening them out, so that by next summer the productive power of Derbyshire will have increased to a greater extent than probably any other county in the kingdom. At the Whitebank and Hasland-lane Collieries, which, after lying waterlogged for many years, have been taken by Mr. G. Senior, the work of clearing them has been actively pushed forward, and already at the former the water has been got almost to the bottom. At Hasland-lane, also, the shaft has been cleared to a considerable depth, and the prospects so far are encouraging, and it is to be hoped that the venture will be a successful one.

Sheffield is still alive with its electioneering affairs, which by no means act as a stimulant to trade. Mr. Roebuck has addressed large bodies of the workmen at their places of business, and has met in most cases with a fair reception. During the latter part of last week, and the early part of this, a requisition, said to be signed by about 1000 of the men at Sir J. Brown and Co.'s (Limited), has been got up, asking Mr. Roebuck to address them at the works. Strong hopes are now entertained of his being returned. The general trade of the town is what may be called moderately good, with the exception of some of the cutlery branches. A fair business continues to be done in most qualities of manufactured iron and steel, and the works in the neighbourhood of Rotherham are doing tolerably well, the men being fully employed. In the other parts of the South Yorkshire district the ironmasters are well supplied with orders for rails, plates, and sheets, whilst the foundries are doing more than they have been.

In Coal there has been an improved demand for household qualities for London, although the trade has not assumed the proportions usual during the winter months. There is no alteration in the amount of business being done with Hull and Grimsby for exportation, whilst about an average tonnage is being forwarded into Lancashire by the Manchester, Sheffield, and Lincolnshire line of railway. A moderate trade continues to be done with Goole for shipment to the east coast. Coke continues in very fair request, both for the furnaces in blast on the Trent, and to some extent for those at Wellingborough, in Northamptonshire, and from which a considerable quantity of ironstone is forwarded into the district. Sinking operations at the extensive colliery works belonging to Messrs. W. Day, Embleton, and Co., situate at Monk Bretton, near Barnsley, are still suspended, owing to the influx of water, which filled nearly one-half of the shaft. Pumps are about to be put down, so that it is expected no great time will elapse before the sinking of the colliery, which will be one of the largest in the county, will be resumed. No more bodies have been got out of the Oaks Colliery during the week, but it is expected that almost any day the workmen may come upon a number of them. At the new sinkings at Ardsley, in connection with the old colliery, the sinkers have met with a good deal of water, but are now getting the better of it. They have got to a depth of about 65 yards, and are preparing to put down tubbing. At the new colliery at Swinton some necessary machinery is also being put down; otherwise matters are proceeding satisfactorily.

One of the collieries belonging to Mr. Radley, of St. Helens, was discovered to be on fire on Sunday. On Monday Mr. John Campbell, son of the cashier, Mr. William Naylor, the underlooker, and a number of men, went down the pit for the purpose of ascertaining the locality of the fire, and also to build up, if possible, the air passages. As the explorers did not return a second party went down, when all the unfortunate men, except three, were found in an exhausted state; they were quickly removed to the surface, and are recovering. The men missing are Campbell, Naylor, and a miner named William Foster. Another party of volunteers descended on Tuesday morning, but they were driven back by the volume of gas and smoke; ultimately the bodies were recovered, and the managers have closed the pit, for the purpose of smothering the fire.

THE CLIFTON COAL SINKINGS.—At a meeting of the workmen employed on these works, near Nottingham, held on Saturday evening, for the purpose of forming a Mutual Provident Society, Mr. Brown, mining engineer, confidently asserted that coal existed, and expressed the hope that in about five months' time they should reach the coal measures. Mr. Green, of the Government Geological Survey and Coal Commission Enquiry, was present, and stated that, having examined samples of the borings, he was convinced of the *bona fide* character of the undertaking, and he believed it would be successful.

THE YORKSHIRE MINING AGENTS' ASSOCIATION.

A numerous and highly influential meeting of colliery viewers, stewards, and agents was held on Saturday, at the Bull Hotel, Wakefield, for the purpose of taking the necessary steps to form an association, having for its object the reading of papers and the discussing of subjects of interest relating to the working of mines. Nearly all the principal collieries in each district in Yorkshire were represented, amongst those present being—Mr. P. Cooper, The Holmes, Rotherham; Mr. Miller, Strafford Main Colliery, Barnsley; Mr. Hodgson, Kippax Colliery, Wakefield; Mr. Bruton (Messrs. Briggs and Co., Limited); Mr. Chambers, Chapeltown; Mr. Arnold, West Allerton; Mr. Maddison, Woolley; Mr. Wilson, Darfield Main; Mr. Champion, Haigh Moor; Mr. J. Beaumont, the Oaks, Barnsley; Mr. G. Minto, the Oaks; Mr. Mosby, Chapeltown; Mr. T. Johnson, Kippax; Mr. J. Warburton, West Riding Colliery; Mr. G. Hunter, Wakefield; Mr. F. R. Atkinson, Mr. Robinson, and Mr. Lumb, Middleton; Mr. Beevors, Glidersome; Mr. O. Andrews, Glidersome; Mr. Wooley, Stanley; Mr. Warburton Stanley; Mr. Keithley, New Hall Colliery; Mr. C. Bradley, Monk Bretton Colliery, Barnsley, and Hawarden, Wales; Mr. W. Rowley, Leeds; and Mr. I. Steele, Stanley, &c.

On the motion of Mr. MADDISON, seconded by Mr. WILSON, the chair was taken by Mr. MILLER. Mr. Hodgson was then appointed secretary to the meeting.

The CHAIRMAN commenced the business by stating what steps had been taken towards establishing the association. He said the first intimation he had that there was a strong desire to form such a society was by a letter which he received from Mr. Hodgson, to the effect that many of his (Mr. Hodgson's) friends connected with mining operations were of opinion that considerable benefit would result from the agents, viewers, and others meeting together at stated times for the purpose of discussing various matters relating to mining. He might say there was a body known as the South Yorkshire Viewers' Association, having its head quarters at Barnsley, but very few seemed to know whether it was dead or living. It was, however, for all practical purposes, of no benefit to those connected with collieries. With a knowledge of that fact, a meeting was held a few weeks ago in Barnsley, when it was agreed to establish a society, to be called "The Yorkshire Mining Agents' Association," the members of which should pay in advance a subscription of one guinea annually. It was also agreed that the president and secretary of the Viewers' Association at Barnsley should be communicated with, with a view to co-operation or amalgamation. A letter on the subject had been received from the president, Mr. Woodhouse, of Derby, in which he said he looked with the greatest satisfaction on the proposal to form an association, having for its object the bringing together those connected with mining operations. He had also received a letter from Mr. Mammatt, the secretary, stating that a meeting of the Viewers' Association was convened for Nov. 10, when the proposals or resolutions forwarded from the Barnsley meeting would be taken into consideration. A letter from the Government Mining Inspector, Mr. Wardell, had been received, in which he said the scheme for forming the association had his hearty good wishes, and he should be happy in doing all he could to promote its success.

Mr. BRUTON then read the minutes of the meeting held in Wakefield, in which it was recommended that Wakefield should be the head quarters of the association, and that ordinary members should consist of persons having the responsible management of underground workings.

Mr. P. COOPER said he was at a loss to find that there was any mining association at Barnsley of a really practical character. There was, he understood, an association there; but he believed it was now more of a convivial character than otherwise. He rather wished to see the association formed on a similar basis to that of the North of England, which was wide in its scope. With regard to the South Yorkshire Viewers' Association, if it really existed, they ought to treat with it, not on the ground that those present should be admitted into it, but that the members of it might be included in the new one, the others being of no practical use. He might also suggest that the name of the association should be more extensive in its application, and it might be called "The Midland Mining Association," embracing the entire coal field, including Derbyshire, Leicestershire, Nottinghamshire, and Warwickshire. He had great doubts whether the association would be able to bear its own weight by a subscription of one guinea a year. The subscription to the North of England Institute was two guineas a year, and at first, even at that rate, it was not self-supporting. Looking at the entire subject in a practical way, he did not see how they could do much before they received an answer from the Barnsley association.

Mr. WARBURTON said if they were to extend their operations to the entire extent of the coal field, they might as well include Lancashire, which was quite as close to Yorkshire as Nottingham was.

Mr. HODGSON agreed with Mr. Cooper that they could not do much until they had received an answer from the South Yorkshire Viewers' Association. However, as he believed they could enter that association as individuals, they could do so *en masse*, but he did not think they should entirely shape their course according to the views of the Barnsley association.—Mr. BEAUMONT said if they entered that association they would be in a position to take their own course, and would have the advantage of the library and museum. (Laughter.)

Mr. P. COOPER said the existing association had many munificent patrons, and it would be advisable for the new body to obtain the hearty co-operation of the influential members of it.

Mr. HODGSON then introduced the question as to whether Barnsley or Wakefield should be the head quarters of the association. He said that Barnsley was a very inconvenient place to reach, and by no means so easy of access as Wakefield. He also held that there were more collieries near to Wakefield than in the Barnsley district. For the year 1867 the collieries in the Leeds, Wakefield, and Normanton districts raised 3,384,500 tons of coal, whilst the Barnsley, Sheffield, and Rotherham districts only raised 3,051,000 tons.

Mr. COOPER suggested that meetings might be held alternately in different places.—Mr. BRADLEY said that it might be so arranged that the meetings could be held in different places, which would tend to increase the number of their members.—The subject was left over to a future meeting.

The CHAIRMAN said it was advisable that they should include as members deputies and overmen, and that the subscription should not be more than one guinea a year.—Mr. WILSON said they might fix the minimum at a guinea, so that if others, if so inclined, could give two or more guineas.

Mr. CHAMBERS had no doubt that in addition to the ordinary members many of the colliery owners would become honorary members.—Mr. MADDISON said it was of great importance that they should have honorary members, and he had spoken to several gentlemen who had promised to become such.

Mr. BEAUMONT considered that by a guinea subscription they would get a very much larger number of members than if they fixed it higher. He should, therefore, move that the subscription be one guinea per year.

The resolution was seconded, and on being put was unanimously agreed to.

Mr. BRUTON said he was of opinion that they should sail under their own colours, and start with a name by which they could be recognised. He thought they should adopt the name agreed to at Barnsley—"The Yorkshire Mining Agents' Association," and he moved that that resolution be agreed to.

Mr. COOPER thought they had better wait for an answer from the South Yorkshire Viewers' Association, for if their own association was to flourish, they must have such men as Mr. Woodhouse with them, and it would be matter for regret if they did not get the countenance of such gentlemen. Indeed, it would be rash in the extreme to try to carry on without the aid of such men as Mr. Woodhouse, who had the confidence of the colliery owners, and who were better known to them than those present were.

Mr. BRUTON, in addition to moving the adoption of the name of the association, moved that the resolutions passed at the Barnsley meeting be confirmed.

Mr. KEITHLEY seconded the resolution, which was put to a show of hands, and carried unanimously.

A deputation was then appointed to wait on Mr. Woodhouse.

Mr. CHAMBERS then moved that a committee be appointed to draw up the necessary rules for the government of the association.—Mr. BRUTON seconded the resolution, which was agreed to.

Mr. BEAUMONT suggested that at the next meeting the business should be commenced by the reading of a paper on a subject connected with mining by some gentleman then present.

Mr. CHAMBERS said he had no doubt a considerable number of the colliery proprietors would join the association. He had spoken to his father on the subject, who stated he would be happy to give it every support, as he considered such associations were worthy of encouragement.

It was then agreed that the meeting should be adjourned to Nov. 14, when the deputation appointed to wait on Mr. Woodhouse will be able to report the result.

A cordial vote of thanks to the Chairman brought the proceedings, which were of a very harmonious character, to a close.

REPORT FROM MONMOUTH AND SOUTH WALES.

NOV. 5.—The improvement which recently set in in the Iron Trade of this district is fully sustained, and it is satisfactory to find that there are now some hopes of the depression which has prevailed for the last two years having nearly passed away. At the leading iron-making establishments operations are being carried on with greater activity than for a considerable time, and the statement made in previous reports as to sufficient orders being obtained to keep the hands tolerably well employed during the winter months is being strengthened as time progresses. Prices have not yet advanced, but it is expected that with an increase of orders from the United States at the commencement of the new year, together with an increase in the home demand, higher rates will be obtained. There is a slight increase in the shipments to America during the past week; and as advices continue favourable as to future requirements, there is every probability of trade with that country improving. Large quantities of rails are about to be forwarded to Peru, and vessels are now wanted at the local ports to convey iron to Mollendo, San Francisco, Buenos Ayres, Nantes, and Jamaica. Iron is also being shipped for Bilboa, and hopes are entertained that ere long a large increase in transactions with Spain will be experienced. In a previous report it was stated that the Russian navigation season had closed, but a large steamer has this week been laden with rails for that empire, the high rates offered being a temptation the owner could not withstand, although the chances of returning before next year are against him. In the home trade contracts are being more freely offered, and for much larger quantities, and it is generally believed that before long a considerable increase will be experienced in the demand. Public confidence is being gradually restored in railway securities, and this will tend to give an impetus to the trade, and place it in something like a satisfactory position. Bars command a ready sale, and large quantities are about to be sent to the East and continental markets, there being every probability of heavier orders being received at the commencement of the new year. The demand for pig-iron is not so good as it was a week ago, but quotations are pretty fairly sustained. Tin-plate makers have sufficient orders to keep their mills going with something like regularity, but the increased competition in the trade causes prices not to be firmly adhered to. The latest advices from the American markets indicate a decrease of stocks in that country, and it is probable the commencement of the new year will witness a firmer adhesion to list quotations.

During the past week the Steam Coal Trade has not improved its position, the storms which have prevailed at short intervals preventing outward bound vessels leaving the local ports. The difficulty merchants and shippers have had to contend with for several weeks past in the want of suitable tonnage for the more distant ports is gradually disappearing, and several fine vessels are now being laden with coal for the East and South American ports. At some of the collieries in the district the output has been reduced, but the sidings are still crowded with loaded wagons awaiting shipment. The demand from the mail packet stations is below the average, but it is known that stocks in the company's hands are now being greatly reduced, therefore there is some prospect of an improvement being shortly experienced. To the Mediterranean ports and French markets about an average quantity is being sent, the demand from the latter steadily increasing. The cold weather which has set in has caused a better enquiry for house qualities, and as the winter progresses this branch of the trade will, no doubt, improve.

The repairing the puddlers' furnaces at Penydarren Works is being

rapidly carried on, and in a short time many of the puddling furnaces will be in active operation.

The inquest on the body of the man killed by the explosion of one of the large boilers at Messrs. J. P. Budd and Co.'s Ystalyfera Iron Works, Swansea Valley, has been brought to a close. Mr. J. T. Newton, the general works manager, who has been in the company's employment upwards of 16 years, was examined. He stated that amongst his other duties he had the general superintendence of the engine and machinery; that the boiler in question was about 23 ft. in length and from 6 ft. 6 in. to 7 ft. in diameter, the tube being 3 ft. 9 in. in diameter, the thickness of iron ½ inch full. The heat was supplied from two puddling-furnaces worked on either side of the boiler, the tube having from end to end a brick partition from the bottom to the top. That, from a minute examination after the accident, he was satisfied the explosion was caused from want of water in the boiler, it being evident that the tube must have been subjected to considerable heat, giving it almost the appearance of annealed iron, which would not have been the case had water been kept over it; and, further, it would not have had that appearance from an old burn. During the enquiry it transpired that 24 boilers were connected and worked together by means of one steam pipe, and are attended to by a feeder and an engineman over him; the latter has, in addition, to attend to his engine, but is supposed to go round himself not less than once in every 40 or 50 minutes, whilst the boilers should be visited by the feeder every 20 minutes, when it is his duty to test the quantity of water and feed them as they require. Besides two guage-cocks the boilers were fitted with a float, which acted on a whistle to show as well when the water was getting low, as when being supplied the proper quantity was in. The Coroner carefully summed up the evidence, and the jury returned a verdict of "Manslaughter" against John Reed and Robert Tyndle, the engineman and feeder, both of whom were committed for trial at the ensuing Assize for the county. The jury recommended for the consideration of the Ystalyfera Iron Company the desirability of appointing two feeders, and releasing the engine man from the responsibility of attending to the boilers.

The arrivals at Swansea include—the Copiapo, from Coquimbo, with 505 tons of copper regulus, for H. Bath and Son; Tamaya, from Carrizal, with 500 tons of copper regulus, and 350 tons of bar copper, for H. Bath and Son; Limena, from Carloforte, with 609 tons of zinc ore, for H. Bath and Son: John, from Huasco, with 253 tons of copper regulus, and 108 tons of copper ore, for H. Bath and Son; George and Charles, from Santander, with 130 tons of zinc ore, for the Zinc Ore Company; Courser, from Carloforte, with 210 tons of zinc ore, for H. Bath and Son; Kilvey, from Tilt Cove, with 430 tons of copper ore, for H. Bath and Son; Laura, from Carloforte, with 365 tons of zinc ore, for H. Bath and Son; Shields, from Carloforte, with 265 tons of zinc ore, to order; Blonde, from Santander, with 198 tons of iron ore, to order. Proteus, from Almeria, with 73 tons of Esparto grass, for A. Bell, and 130 tons of copper ore, to order. Queen of the Belgians, from Bilboa, with 100 tons of lead ore, and 170 tons of iron ore, for W. H. Tucker; Constance, from Carloforte, with 300 tons of zinc ore, for H. Bath and Son.

THE COLLIERY ACCIDENT NEAR RUABON.—The enquiry into the deaths of ten persons killed in the recent explosion at the Wynnstay Colliery, was resumed on Tuesday before the Coroner, Mr. Thelwall, who was assisted by Mr. Higson and Mr. Dickinson, Government Inspectors. In the new evidence adduced, it was stated by a boy named Griffiths that on Saturday week he, whilst at work in the pit, found a naked candle stuck in a bit of clay near the slide doors leading into the disused workings called Fox's Break, in which, according to the opinion of the majority of the witnesses, the gas accumulated. Naked lights were under any circumstances forbidden in the pit. The Coroner said that at the date at which this candle was found, nearly a month after the accident, made the fact valueless as evidence of the cause of the explosion. He thought it rather proved that the directors had occasion to feel very thankful that they had not had another dreadful accident. Mr. Higson, Government Inspectors for the district, said he descended the pit on the morning of the accident, and made a careful survey of the portion of the pit where the explosion had occurred. The result of his inspection was that he believed gas had been permitted to accumulate in Fox's Break, and that when a mason built up the air-hole in the manner described in the first day's evidence, the effect would be to dislodge the gas and drive it towards the opening of the break. As to where or how it had ignited he was not prepared to give an opinion, but he did not think it had fired from the furnace. He was perfectly satisfied with the arrangements made by the board for securing the safety of the men working in the colliery. Mr. Dickinson, who had assisted Mr. Higson in his investigation of the accident, did not agree with his views on the point of accumulation of the gas, rather leaning to the opinion that the accumulation had taken place in another set of disused workings higher up the level. He was not able to form a definite opinion as to where or how the gas had fired, but he thought the most likely explanations were either that it had been ignited by the action of the two air-way men, or that it had fired at the furnace.—This was the whole of the evidence, and the enquiry was then adjourned.

IMPORTANT DECISION UNDER THE MINES INSPECTION ACT.

At a special Petty Session held at Tredegar, on Wednesday, before Mr. J. Davies and Mr. F. Levick, jun., the important case of Brough *v.* the Tredegar Iron Company came on for re-hearing by order of the Court of Queen's Bench. Mr. Simons represented Mr. Brough, and Mr. Charles James appeared for the defendants.

In June, 1865, a serious explosion occurred at the Bedwellty Pits, the property of the Tredegar Iron Company, by which 26 lives were lost. From the evidence given before the Coroner, Mr. Lionel Brough, Government Inspector of Mines for the district, considered it his duty to institute certain proceedings against the company; and one of the charges was that they had infringed the first general rule, which provides that an "adequate amount of ventilation should be constantly produced in such colliery to dilute and render harmless noxious gases to such an extent that the working places of the pits, levels, and workings of such colliery, and the travelling roads to and from such places, should, under ordinary circumstances, be in a fit state for working and passing therein." According to general opinion, the explosion occurred at the top of Roberts' heading, and the magistrates decided that on the morning of the explosion it was not a "working place" within the meaning of the Act, as it had been fenced off to prevent men and boys going there, although it was admitted that the boy Jones, who it was supposed fired the gas, had got through the fencing. On the application of Mr. Simons, a case was granted for the Queen's Bench, and we append a *verbatim* report of the proceedings before the Judges—Lord Chief Justice Cockburn, Justice Blackburn, Justice Mellor, and Justice Lush.

Lord Chief Justice COCKBURN: We seem to be entirely agreed that it is not enough to say that the working place itself has been sufficiently ventilated, and that the provision of the statute and the intention of the Legislature indicated in that section, is that so much of the mine as may operate upon the working place in which any accumulation of gas may act mischievously upon the working place must be kept in a sufficient state of ventilation. I do not mean to say with reference to the observations of Mr. James (counsel for the defendants) that there may be miles of roads in which gas may be accumulated, and that they are to be blocked up by walls hermetically, or that it is necessary at all that it should be ventilated; but you must look to the ventilation of so much as is immediately contiguous to the working place of the mine which may be productive of mischief by bad ventilation, and cause an accumulation of gas in the working place. It is not enough to ventilate the working place, but so much of the mine also as is necessary to the safety of the working place. They seem to have thought if the working place itself was sufficiently ventilated that was enough, whether the accident arose from defective ventilation, or whether the disaster happened not from defective ventilation, but from the unfortunate fact of a workmen or boy having got into this part of the mine where the gas had accumulated, and from which it ought to have escaped—it was owing to a boy having got in there with a light which caused the explosion. This is a circumstance which the magistrates do not seem to have taken sufficiently into account. I think the case ought to go back to be re-heard, with an intimation of opinion that, although the working place is sufficiently ventilated, yet the part immediately contiguous is not; and by reason of defective ventilation of the surrounding part the working place was rendered unsafe.

Justice BLACKBURN: I agree in the construction of the rule. I cannot help thinking if the rule is considered quietly and calmly it hardly needs explanation. The "adequate amount of ventilation to be constantly produced in such colliery to dilute and render harmless noxious gases." There there is nothing said about ventilation produced in the working places, or the travelling places in mines. Then it says "to such an extent that the working places of the pits, levels, and workings of such colliery and the travelling roads to and from such working places should, under ordinary circumstances, be in a fit state for working and passing therein." It is not giving sufficient and adequate ventilation in words, as the Justices seem to have thought only that they shall ventilate the working and travelling places, but it is that they shall ventilate the mines in such a manner that the working places and the travelling places shall be safe on any occasion.—Justice MELLOR: I am of the same opinion.

Justice LUSH: I am of the same opinion. The duty is to ventilate—that is, to prevent the inroad of noxious gas into the working places.

Mr. JAMES stated that, after the order of the Court of Queen's Bench, and the opinions expressed by the judges, he felt it his duty to his clients not to recommend any further opposition in the case.

The magistrates, having consulted, came to the conclusion that, according to the ruling of the Court of Queen's Bench, the case had been proved, and they inflicted the mitigated penalty of 5*l.*, and costs.

LIQUID FUEL.—An elaborate and very interesting report upon the result of the trial of Messrs. Dorsett and Blythe's system of burning petroleum (referred to in the *Mining Journal* of Oct. 10 and Oct. 17) has been made by Dr. B. H. Paul, F.C.S., in which he states that the result actually obtained on board the Retriever was only about ½lb. less than the maximum duty indicated by calculation, and this approximation between theoretical and practical results indicates that the application of liquid fuel, according to Messrs. Dorsett and Blythe's system, ensures not only a very perfect combustion of the oil, but also a very full utilisation of the heat generated.

IMPORTANT TO ENGINEERS AND USERS OF STEAM MACHINERY—EVERY BOILER SHOULD HAVE A FEED PUMP, INDEPENDENT OF THE STEAM-ENGINE.—This is the practice of the leading firms of engineers, who are now using exclusively the Donkey Pump manufactured by ALEXANDER WILSON and Co., Engineers, Vauxhall Ironworks, Nine Elms, London, S.W.

HOLLOWAY'S PILLS AND OINTMENT—THE WANDERER.—For all complaints ordinarily affecting mankind, whether internal or external, nothing can compare with these peerless remedies. Young and old, of both sexes, may use them with certain success and perfect safety; they are equally efficacious in hot and cold climates; no change of temperature or long keeping impairs their curative properties, which never deteriorate, and are, therefore, especially adapted for emigrants and officers, or persons whose pleasures or duties lead them to foreign countries or various climates. These remedies any man can safely prescribe with the absolute certainty that he cannot do wrong; they purify, and purifying must be beneficial, not only for the cure of the present ailment, but security against future disease.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN RE GREAT RETALLACK MINE.

TO BE SOLD, pursuant to an Order made in the Cause of Watson *v.* Anderson and Others, dated the 25th day of September, 1868, at the Registrar's Office, at Truro, on Wednesday, the 11th day of November next, at One o'clock in the afternoon, the

29 (4710th) PARTS or SHARES of the defendant, Charles Wilkins; the
24 (4710th) PARTS or SHARES of the defendant, John Cokes; the
16 (4710th) PARTS or SHARES of the defendant, Thomas Splatt; the
15 (4710th) PARTS or SHARES of the defendant, William Jones; the
20 (4710th) PARTS or SHARES of the defendant, William Rayner; the
10 (4710th) PARTS or SHARES of the defendant, Richd Cartwright; and the
3 (4710th) PARTS or SHARES of the defendant, William Thompson;

Of and in the said MINE. JOSEPH ROBERTS, Truro
(Agent for Messrs. R. W. Childs and Batten, 25, Coleman-street, London, Plaintiff's Solicitors).

Dated Registrar's Office, Truro, 28th October, 1868.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN RE WEST WHEAL FRANCES MINE.

TO BE SOLD, pursuant to an Order made in the Cause of PIKE and Another *v.* SMITH and Others, dated the 2d day of October, 1868, at the Registrar's Office, at Truro, on Wednesday, the 18th day of November next, at One o'clock in the afternoon, the

4 (512th) PARTS or SHARES of the defendant;

Of and in the said MINE.
JOSEPH ROBERTS, Truro, Plaintiff's Solicitor.

Dated Registrar's Office, Truro, Nov. 5th, 1868.

Companies Acts, 1862 and 1867.

IN THE MATTER OF THE OLD WESTMINSTER MINING COMPANY (LIMITED). *IN LIQUIDATION.*

TENDERS are INVITED for the PURCHASE of the COMPANY'S INTEREST in the LEASES and AGREEMENTS of the PROPERTIES and LANDS which have hitherto been WORKED by the said COMPANY, with all the RIGHTS, POWERS, and PRIVILEGES conveyed or granted thereby to the MINERALS under the said LANDS, extending about three miles from east to west in the parish of LLANARMON, FLINTSHIRE, together with the engines, machinery, ropes, tackle, ladders, materials, &c., now in and belonging to the mine.

The mineral setts are held under leases from the Marquis of Westminster, at a royalty of 15*s.* per ton for lead ore.

The MACHINERY consists of THREE STEAM ENGINES, 26 in., 20 in., and 17 in. cylinders respectively, with all necessary pumps, gearing, rods, crushers, dressing floors, railway iron, wagons, kibbles, ladders, whims, ropes, chains, &c.

Catalogues can be obtained, with all further information, upon application at the undermentioned offices of the liquidators, to whom all tenders should be addressed, not later than the 14th day of November, 1868.

15, New Broad-street, London, E.C.—Dated 29th October, 1868.

Companies Acts, 1862 and 1867.

IN THE MATTER OF THE BRYN-YR-OWEN COLLIERY COMPANY (LIMITED). *IN LIQUIDATION.*

THE LEASE of this COLLIERY, with all the PLANT, STORES, STOCK, and MATERIALS upon it, will shortly be OFFERED FOR SALE, BY PUBLIC AUCTION.

Information may be obtained on application to Mr. H. H. OAKES, at the Bryn-yr-Owen Colliery, near Ruabon, or to No. 6, Queen-street-place, London, E.C.
JOHN PHILLIPS, Liquidator.

In the Matter of the Companies Act, 1862,
AND IN
THE MATTER OF THE HENDRE LEAD MINING COMPANY (LIMITED).

MOLD, FLINTSHIRE.

POWERFUL and COSTLY MACHINERY, of the most expensive description, and in complete working order, together with the MINING APPARATUS, TOOLS, STORES, and MATERIALS, in One Lot.

A Lease of the Mine may be had from the Landlord on favourable terms.

MESSRS. J. AND E. BADDELEY are directed by the Liquidators TO SELL, BY AUCTION, at the Auction Mart, Tokenhouse-yard, London, on Friday, November 20, at Twelve for One, in One Lot, the VALUABLE PLANT and MACHINERY on the WORKS of

THE HENDRE MINE,

About four miles from MOLD, in the county of FLINT, comprising a 900-horse power CORNISH PUMPING ENGINE, with 100 in. cylinder, and 11 ft. stroke; a 576-horse power CONDENSING ENGINE, with 80 in. cylinder, and 10 ft. stroke; a 24-horse power CONDENSING ENGINE, with 22 in. cylinder, and 5 ft. stroke; a 36-horse power horizontal high-pressure ENGINE; two smaller ENGINES; seven 35 ft. cylindrical BOILERS; four 30 ft. tubular BOILERS; one 15 ft. ditto; a steam crusher, hydraulic lifting pumps, patent 8 ton weighing machine, powerful winches, screws, fittings of pits, iron ladders, wire rope 30 tons of castings, &c., lathes, and other tools, quantity of timber, and effects.

The property may be viewed, by order only, to be obtained of the auctioneers and particulars may be had on application to the captain of the mine, on the premises; and in London, of T. H. LAMBERT, Esq., solicitor to the liquidators, 90, Lower Thames-street; and of Messrs. J. and E. BADDELEY, auctioneers and surveyors, 26, Bishopsgate Within, City, E.C.

ELIGIBLE INVESTMENT.—MILTON ABBOT, DEVON.

MESSRS. WARD AND CHOWEN WILL SELL, BY AUCTION (unless previously disposed of by private contract, of which due notice will be given), on Monday, the 9th of November next, at the Queen's Head Hotel, Tavistock, at half-past Three o'clock in the afternoon, all that very

VALUABLE FREEHOLD ESTATE,

Situate at FOGHANGER, in the parish of MILTON ABBOT, DEVON, now in the occupation of Mr. William Doidge as tenant thereof, comprising a good FARM HOUSE, COTTAGE, OUTBUILDINGS, and about THIRTY-SEVEN ACRES of superior grazing and arable LAND, which will be offered for sale in the following lots, or as an entirety, as may be determined on at the time of sale.

LOT 1.—20A. 2R. 4P. LOT 2.—16A. 2R. 29P.

The above estate lies in one of the best agricultural districts of the county, being situate in the far-famed parish of Milton Abbot, Devon, where the richness of the soil is proverbial. The land is of superior quality, and well watered, and presents to capitalists a favourable opportunity of acquiring a desirable investment.

The estate is intersected by good roads, and is situate about five miles from the excellent market town of Tavistock.

Lot 2 is especially valuable in a mineral point of view, as rich mineral lodes are known to exist in the property. A partial development of the same was made some few years ago, when the mine was known as Wheal Walter, and sufficient indications were then discovered to justify the belief that large deposits of rich ore lay underneath.

To mining capitalists this is believed to be a valuable speculation, and well worthy their especial consideration.

For viewing, apply to the tenant, Mr. WILLIAM DOIDGE, residing on the premises; and for conditions of sale, and further particulars, either to the Auctioneers, at Uppaton, Milton Abbot, or to Messrs. BRIDGMAN and SON, Solicitors, Tavistock.—Dated Oct. 19, 1868.

NEW CORNISH CONSOLIDATED MINES, LATCHLEY
(Four miles from Tavistock).

MESSRS. WARD AND CHOWEN WILL SELL, BY AUCTION, on Tuesday, the 10th of November, 1868, at Twelve o'clock precisely, the undermentioned MINING MATERIALS and MACHINERY on

THE NEW CORNISH CONSOLIDATED MINES,

LATCHLEY, in the parish of CALSTOCK, CORNWALL—viz.:

STEAM CORNISH PUMPING ENGINE, nearly new, 9 ft. stroke, 50 in. cylinder; TWO 12 ton BOILERS.

WHIM ROTARY ENGINE, 25 in. cylinder, 6 ft. stroke, with 8 ton BOILER sweep rod and shaft of hammered iron, hauling cage, complete.

CORNISH CRUSHER, 22 in. rolls, with raft-wheel and gear work.

TWO 8 arm CAPSTANS, with 200 fms. 10½ in. rope, nearly new; shaft bob, saddles, and brasses, complete; 2 8 arm capstans, with king and queen posts; about 200 fms. 1½ in. steel wire rope; 60 ft. shears, with 2 pulley wheels, brasses, &c.: 6 workings; 3 H pieces; 8 windbores; 3 14 in. 9 ft. pumps; 40 11 in. 9 ft. pumps; 4 10 in. 9 ft. pumps; 10 9 in. 9 ft. pumps; 35 7 in. 9 ft. pumps; 6 6 in. 9 ft. pumps.

Several tons of tram iron; small bridge rail iron; new crown iron chain; and small scrap; crab winch, double power; cast iron air pipes; rod plates; quantity of new and old steel: sledges, picks, and tools; 200 fms. of ladders and air pipes; 27 8 ft. 10 in. main rods; 14 5 ft. 12 in. ditto; powder house, carpenters' shop, &c., &c.

Descriptive catalogues may be had on the mine, or of the Auctioneers, Uppaton, Milton Abbot, Tavistock.

Refreshments at Eleven o'clock, and the Sale to commence at the time above stated.—Dated Milton Abbot, Oct. 24, 1868.

LLYFNANT SLATE QUARRY,
MONTGOMERYSHIRE, NORTH WALES.

MR. GEO. A. H. POTTER, Auctioneer and Valuer, has been instructed TO SELL the ABOVE, BY PRIVATE TREATY, near the Railway, and close to the River.

Full particulars sent on application to the Auctioneer, 17, Orange-street, Swansea, South Wales.

NORTH WALES—QUEEN'S FERRY, FLINT.
CLOSE TO THE RAILWAY.

TO BE SOLD OR LET, DESIRABLE FREEHOLD MANUFACTURING PREMISES, with ENGINE-POWER and LAND.—A plot of about one acre, with substantial factories, engine-house chimneys, stable, outbuildings, and sheds, suitable for any manufacturing purpose. ENGINE of most recent construction, and BOILER nearly new.

For further particulars, apply to JOHN TEMPLE, 32, Redcross-street, Liverpool.

Contract for Coals for Valparaiso.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that on TUESDAY, the 10th November next, at Two o'clock, they will be READY to TREAT with such persons as may be WILLING to CONTRACT for SUPPLYING and DELIVERING into store or on board Her Majesty's steam-ships and vessels at Valparaiso, or into store at Habas, if required, on arrival,

800 TONS SMOKELESS SOUTH WALES COALS.

The coals are to be shipped by the 30th November, 1868.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Valparaiso," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.

Contract Department, Admiralty, Somerset House, Oct. 26, 1868.

COMMISSARIAT,
ALDERSHOT CAMP.

Miscellaneous Supplies.

TENDERS will be RECEIVED at this Office until noon on Tuesday, the 24th day of November, for the SUPPLY of the following articles, from 1st January to 31st December, 1869:—

BAKERY SUPPLIES.

MALT, per bushel.	OLD SACKING, per cwt.
POTATOES, per cwt.	GREASE, for oven lamps, per cwt.
SALT, per cwt.	GREASE, for cart wheels, per cwt.
SOAP, per cwt.	COKE, per ton of 2240 lbs.

INSTRUCTIONAL KITCHEN.

PRESERVED BEEF (in tins of 6 lbs. each), per lb.	OATMEAL, per pint.
	MUSTARD, per lb.
PRESERVED POTATOES (in 7 and 14 lbs. tins), per lb.	SPLIT PEAS, per pint.
	VINEGAR, per pint.
RAISINS, per lb.	RICE, per lb.
CURRANTS, per lb.	SALT BEEF, per lb.

Forms of tender and conditions of contract can be obtained on application at this office, by letter or in person, between the hours of Ten A.M. and Four P.M., where any further information that may be required will be furnished.

R. ROUTH, Deputy-Commissary-General.

Commissariat Office, South Camp, Aldershot, November, 1868.

IMPORTANT MINING PROPERTY FOR SALE IN RHENISH PRUSSIA.—A BLENDE MINE, giving 3 to 4 tons of blende per fathom; a COPPER MINE, averaging 14 per cent. of copper; and THREE LEAD MINES, with 65 per cent. of lead.

Apply for particulars, to O. J. YOUNGHUSBAND, Esq., Wiehl, Kreis Gummersbach, near Cologne, Prussia.

SLATE QUARRY TO BE LET OR SOLD.—EXTENSIVE and VALUABLE LEASEHOLD PROPERTY, held under lease from the Marquis of Waterford, EXPRESSLY for OPENING UP the EXTENSIVE SLATE BED which traverses part of the MOUNTAIN RANGE, called—

"THE COMERAGHS,"

On the LANDS of CLONDONNEL, county of WATERFORD, within four statute miles of KILSHEELAN, where there is every facility for sending off slates by boat or rail, either for sea or inland trade.

A good deal of work has been done, and slates got; but, compared with the extent of this slate property, it may be called a trial only, yet sufficient to prove to those versed in such business that there is good slate and a large field for extensive operations. The ground rises about 1 in 3 to 700 feet, and no machinery wanted for hauling; water for dressing-machines can be had at all times, and from a very high fall.

None but principals dealt with.

Address, GEORGE MOORE, Esq., Coolfin, County Waterford.

TO COAL PROPRIETORS, AND OTHERS.

TO BE LEASED, the WHOLE of the VEINS of COAL under WAINYBARRA FARM, situate in the parish of RUDRY, in the county of GLAMORGAN, containing about ONE HUNDRED AND EIGHTY ACRES.

This property contains the celebrated LANTWIT COAL, worked by THOMAS POWELL, Esq., and also worked under the adjoining land by W. S. CARTWRIGHT, Esq., and in the neighbourhood by the Energlyn Coal Company, being superior quality as house coal, &c.; and it also contains the thick group of veins of coal, including the celebrated RISCA BLACK VEIN, all of which can be won at reasonable depth.

A railway passes through the property to Cardiff and Newport, distance to either place only about eight miles, thus having great advantage, being so near to ports of shipment.

Further particulars can be obtained on application to Mr. HENRY MORGAN, Mineral Agent, &c., Pontypridd, Glamorganshire.

MERIONETHSHIRE.—A very promising NEW MINE TO BE DISPOSED OF forthwith, on reasonable terms, near a shipping port, and within about two miles of a railway station, containing a very rich lode, well defined, highly crystallised, and a good deposit of copper; plenty of water at hand, and a good back for levels.

For further particulars, apply to Mr. JOHN WILLIAMS, Grogan, Harlech, North Wales.

FOR SALE,—A FIRST-CLASS SECONDHAND 8-horse power PORTABLE STEAM-ENGINE, of recent construction, by eminent makers.

NEW PORTABLE STEAM-ENGINES, from 5 to 25-horse power, of the highest order, on advantageous terms. Prize Medals awarded—Hamburg, 1863; Paris, 1867.

Apply to BARROWS and STEWART (late Barrows and Carmichael), Engineers, Banbury.

MINERAL WAGONS.

FORTY LEXTON WAGONS, nearly new, TO BE LET, OR SOLD, on deferred payments.

TO BE LET, a TRACT of very superior IRONSTONE, on the DRAYTON ESTATE, with a siding in connection with the Midland Railway, and other necessary appliances.

Apply, by letter, to M. BIGGE, Esq., Drayton, Threpston.

ESTABLISHED MORE THAN HALF A CENTURY.

THE TAVISTOCK FOUNDRY, IRONWORKS, AND HAMMER MILLS,

which have been carried on for more than half a century by
MESSRS. GILL AND CO.,
and obtained a
HIGH REPUTATION FOR
SHOVELS AND OTHER TOOLS
as well as for
ENGINEERING AND FOUNDRY WORK,
have been purchased by
MESSRS. NICHOLLS, MATHEWS, AND CO.,
BEDFORD IRONWORKS, TAVISTOCK.

For thirty years Messrs. NICHOLLS, MATHEWS, and Co., have been the proprietors of the latter works, but are now about to remove to the

TAVISTOCK FOUNDRY,

where, having the advantage of a never-failing stream of water of upwards of 200-horse power, they will have increased facilities for speedily and satisfactorily executing all orders entrusted to them.

Address,—
MESSRS. NICHOLLS, MATHEWS, AND CO.,
TAVISTOCK FOUNDRY, TAVISTOCK.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL.
REFINED METALLIC BISMUTH.
OXIDE OF COBALT.
GERMAN SILVER—IN INGOTS, SHEET, WIRE, &c.
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER,
Purchaser of Borate of Lime and Tincal.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

RAILWAY WAGON WORKS, BARNSLEY.

MESSRS. G. W. AND T. CRAIK
ARE PREPARED TO
SUPPLY COAL AND COKE WAGONS
OF EVERY DESCRIPTION,
Either for cash, or by deferred payments through wagon-leasing companies.

WAGONS PROMPTLY REPAIRED.

LOCOMOTIVE TANK ENGINES FOR MINES AND COLLIERIES.

HENRY HUGHES AND CO.,
FALCON WORKS, LOUGHBOROUGH,
Have ALWAYS in PROGRESS, and can SUPPLY at short notice,
TANK ENGINES
To suit any gauge of railway and gradients from 1 in 16.

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED),

MANUFACTURERS OF RAILWAY WAGONS, WHEELS AXLES, LORRYS, CARTS, WOOD WHEELS, &c.,
IRONWORKS, BEVERLEY, YORKSHIRE.

RAILS OF PERMANENT WAY, CONTRACTORS' AND COLLIERY SECTIONS,

CHAIRS, FISH-PLATES, SWITCHES, AND CROSSINGS.
Sundry lots of RAILS, suitable for sidings, &c., ON SALE, by—
Mr. ROBERT WRIGHTSON, NEWPORT, MONMOUTHSHIRE.

MILNER'S STRONG HOLDFAST AND FIRE-RESISTING SAFES,

CHESTS, DOORS, AND STRONG ROOMS,
With the progressive and recent improvements effected after half a century's experience, effectually guard against FIRE and BURGLARS.
LIVERPOOL, MANCHESTER, SHEFFIELD, LEEDS, HULL, and
47A, MOORGATE STREET, CITY, LONDON.

PIG LEAD.

MESSRS. WESTON AND COLLINGBORN SOLICIT ORDERS for SOFT PIG LEAD, which they are producing of the very best qualit Prices on application.
WORKS,—SWINFORD, GLOUCESTERSHIRE.
OFFICE,—18, PETER STREET, BRISTOL.

TO COLLIERY PROPRIETORS.

UPWARDS of 6000 LARCH, 4000 OAK POLES, 100 OAK and OAK PLANKS upwards of 20 feet long; ELM COAL-PIT RINGS, ready cut, in stock.
All kinds of ENGLISH TIMBER supplied in the round, and OAK and LARCH SCANTLING cut to sizes for railway and coal-wagon building.
Dealer in all kinds of BRITISH TIMBER.
MILLWRIGHTS, ENGINEERS, COACH BUILDERS, WHEELWRIGHTS, &c., supplied on the most reasonable terms.
JAMES ATKINSON,
No. 63, GRANBY ROW, MANCHESTER.

WILLIAM HANN AND SON beg to offer to SUPPLY COLLIERY OWNERS, and the public generally, with their
PATENT SAFETY LAMPS,
Which have been proved INEXPLOSIVE in the highest obtainable current of gas, of 48 ft. per second. No. 1 weighs 24 ozs., is simple in its construction, burns with a steady and nearly uniform flame in moderate currents, gives a good light, and is in every respect a practicable lamp. Price, 9s. each; if in quantities of a dozen or upwards, 8s. 6d. each, delivered free. Orders received by—
WILLIAM HANN AND SON,
HETTON COLLIERY, FENCE HOUSES.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.
For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE, upon warrant that it will prove equal to, if not better than, any to be procured elsewhere.

JOHN AND EDWIN WRIGHT,

PATENTEES.
(ESTABLISHED 1770.)
MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED
PATENT FLAT AND ROUND WIRE ROPES,
From the very best quality of charcoal iron and steel wire.
PATENT FLAT AND ROUND HEMP ROPES.
SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.
UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM
CITY OFFICE No. 5, LEADENHALL STREET, LONDON, E.C.

Swan Rope Works.

GARNOCK BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,
MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD STRENGTH.

ESTABLISHED 1844.

GREAT BRITAIN MUTUAL LIFE ASSURANCE SOCIETY.

101, CHEAPSIDE, LONDON, E.C.

EMPOWERED by Special ACT of PARLIAMENT, 25th and 26th Vic., cap. 74.
Terminating annual premiums and sums assured payable during life.
PECULIAR ADVANTAGES OFFERED TO POLICY HOLDERS BY THIS SOCIETY.

The profits applied—first, in extinguishing the premiums AT A GIVEN DATE, and afterwards in making the policy PAYABLE DURING LIFE; this important advantage being secured without the payment of any additional premium.
ANDREW FRANCIS, Secretary.

SIX POUNDS PER WEEK
While laid up by injury, and
ONE THOUSAND POUNDS IN CASE OF DEATH CAUSED BY ACCIDENT OF ANY KIND,
May be secured by an annual payment of from £3 to £6 5s.
TO THE
RAILWAY PASSENGERS' ASSURANCE COMPANY.
RAILWAY ACCIDENTS ALONE
May also be provided against by insurance tickets for single or double journies.
For particulars, apply to the Clerks at the Railway Stations, to the Local Agents, or at the
OFFICES,—64, CORNHILL, and 10, REGENT STREET, LONDON.
W. J. VIAN, Sec.

CARLISLE BISCUIT COMPANY.

CARLISLE BISCUIT COMPANY.—WHOLESALE AND EXPORT BISCUIT MANUFACTURERS, CARLISLE, & 56, CITY ROAD, LONDON. For twenty years their biscuits have maintained a high reputation. For export they are especially prepared, so as to keep in any climate. To wholesale buyers a liberal discount is allowed. Price lists forwarded on application.

MEAT BISCUITS FOR DOGS.

MEAT BISCUIT FOR DOGS, made by the CARLISLE BISCUIT COMPANY, is undoubtedly the best and cheapest food for dogs that has ever been introduced. It is equally adapted for sporting dogs, yard dogs, or for pets. It requires no cooking, and, without any other food, keeps dogs in the highest condition. Many of the prize-taking dogs at the last Birmingham show were fed, from puppies, on this biscuit. Price 20s. per cwt. at Carlisle; or at their depôt, 56, City-road, London, 22s. per cwt. Post-office orders payable to WILLIAM SLATER, Carlisle. Sold by corn chandlers everywhere. Book of testimonials from well-known country gentlemen, sent on application. Agents wanted.
WILLIAM SLATER, Managing Director.

NICHOLLS, MATHEWS, AND CO., ENGINEERS,

TAVISTOCK FOUNDRY, TAVISTOCK.
MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

WILLIAMS'S PERRAN FOUNDRY COMPANY,

PERRANARWORTHAL, CORNWALL.
MANUFACTURERS of STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

RAILWAY CARRIAGE COMPANY (LIMITED)

ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BIRMINGHAM WAGON COMPANY (LIMITED)

MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
WAGON WORKS,—SMETHWICK, BIRMINGHAM.
*** Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED AND REDUCED),

MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK used in the CONSTRUCTION of RAILWAY ROLLING STOCK.
OFFICES AND WORKS,
HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.
LONDON OFFICE.—118, CANNON STREET, E.C.

IN THE TOWER FOUNDRY IS THE TYNE DEPOT FOR MACHINERY of every description for WOOD and IRONSTONE, CORN CRUSHING, and PUG MILLS. Also, AGRICULTURAL IMPLEMENTS.
PROPRIETOR,—G. HARLE, JUN.,
No. 49, MAPLE STREET, NEWCASTLE.
PURCHASERS of PORTABLE ENGINES and STEAM CRANES will do well to ask G. HARLE's price for the same.

IMPORTANT TO ENGINEERS AND FOUNDERS, FOR POLISHING BRASS, STEEL, and other purposes; also IMPORTANT as KNIFE POWDER.
MAGNETIC ORE PULVERISED,
Considerable quantity of the above ore TO BE SOLD, BY PRIVATE CONTRACT. Samples and prices may be had on application to Mr. THOMAS SCOTT Mount Pleasant, Dolgelly.

TO MANUFACTURERS OF YELLOW METAL, MERCHANTS, AND OTHERS.
CAUTION.

WHEREAS, it has recently come to the knowledge of the directors of ELLIOTT'S PATENT SHEATHING AND METAL COMPANY (LIMITED) that quantities of YELLOW METAL made by other Manufacturers have been exported to India and elsewhere, bearing a FRAUDULENT IMITATION of the exclusive BRAND or TRADE MARK of the company for Metal of that description—namely, a representation of a Rupee, with or without the word "soft" printed thereunder,
NOTICE IS HEREBY GIVEN, that in case any manufacturer, or other person, shall STAMP, IMPRESS, or AFFIX to or on any YELLOW METAL not made by the said company, the said BRAND or TRADE MARK, or any colourable imitation thereof,—or in case any merchant or other person shall EXPORT or SELL any such Yellow Metal so marked as aforesaid,—PROCEEDINGS will forthwith be COMMENCED against such manufacturer, merchant, or other persons, to RESTRAIN him or them from such wrongful acts as aforesaid, and RECOVER DAMAGES in respect thereof.
RYLAND AND MARTINEAU, Solicitors to the said Company.
Birmingham, August, 1868.

ENGINES AND BOILERS FOR SALE.

MESSRS. NICHOLLS, MATHEWS, AND CO. have FOR SALE ENGINES of VARIOUS SORTS and SIZES, AND SEVERAL GOOD TEN TON BOILERS. All are in excellent condition, and well worthy the attention of purchasers. Also, a WATER WHEEL, 35 ft. diameter, 3 ft. 2 in. breast, with iron axle, complete; and one 12 head STAMPS, axle, stands, frames, 12 heads of stamps, iron lifters, and two driving-wheels, complete.
Full particulars may be obtained by applying to Messrs. NICHOLLS, MATHEWS and Co., Tavistock Foundry, Tavistock.

CREASE'S NEW AND
IMPROVED PNEUMATIC TUNNELLING ENGINE.

THE PROPRIETORS of this INVENTION, in order to bring its CAPABILITIES more prominently before the PUBLIC, are OPEN to TAKE CONTRACTS for DRIVING LEVELS.
Preference will be given to ADIT LEVELS and those places where ROTATORY MACHINERY is in use, and can be applied to driving the AIR COMPRESSOR.
Address—E. S. CREASE, 7, Hoe-street, Plymouth.

BRITISH, COLONIAL, AND FOREIGN PATENTS, REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.
MICHAEL HENRY,
Mem. Soc. Arts, Assoc. Soc. Engineers, Compiler of the "Inventors' Almanac," and the Author of the "Defence of the Present Patent Law,"
PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.
Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised Searches conducted. Abstracts, Cases, and Opinions drawn.
Mr. HENRY has had especial experience in technical French, and in French Manufacturing and Commercial Matters.
Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

Prize Medal—International Exhibition, 1862.

CHAPLIN'S PATENT PORTABLE STEAM ENGINES, &c., FOR PUMPING AND WINDING.

These engines are SPECIALLY ADAPTED for PITS, QUARRIES, &c. They are EXCEEDINGLY SIMPLE in ARRANGEMENT and STRONG. NO FOUNDATION of CHIMNEY STALK being NECESSARY, they can be ERECTED or REMOVED with VERY LITTLE TROUBLE or EXPENSE, and are WELL ADAPTED for HOME or FOREIGN USE.
Sizes, from 2 to 25-horse power.

STEAM CRANES, STEAM WINCHES, CONTRACTORS' LOCOMOTIVES, HOISTING ENGINES, PUMPING AND WINDING GEARING, &c.

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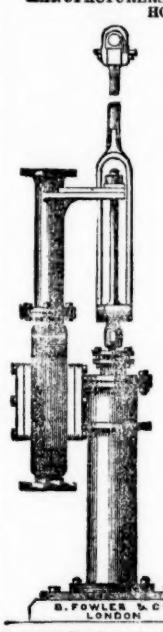

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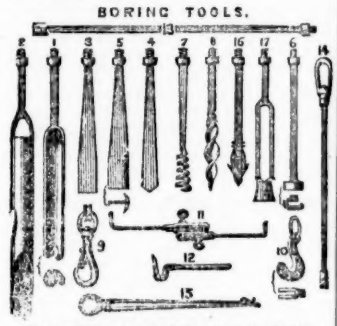

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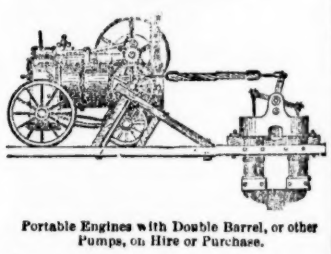

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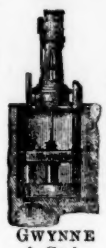

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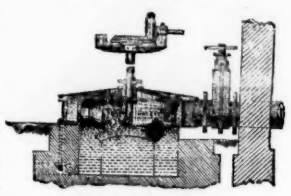

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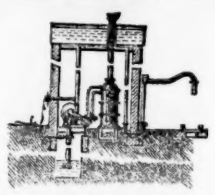

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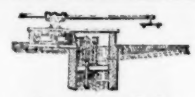

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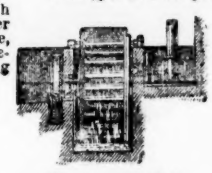

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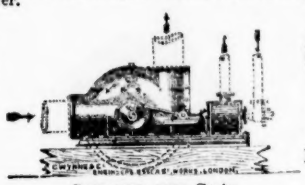

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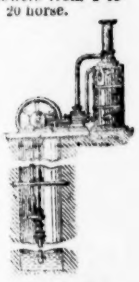

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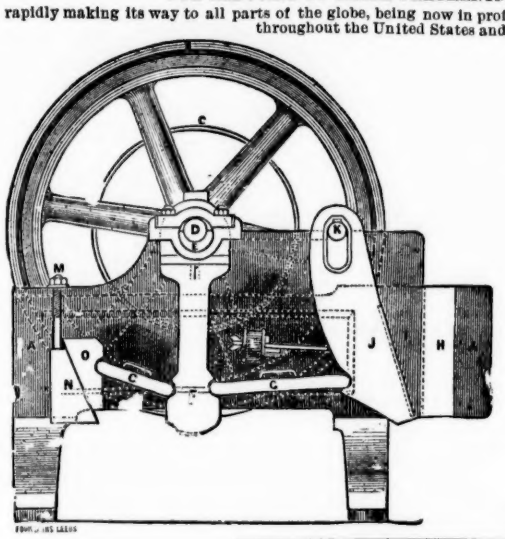

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For the Parys Mining Company, JAMES WILLIAMS.
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CAUTION!

BLAKE'S PATENT STONE BREAKER,

In Chancery.

BLAKE v. ARCHER, NOVEMBER 12, 1867.

His Honour the Vice-Chancellor WOOD having found a VERDICT in FAVOUR of the PLAINTIFFS in the above Cause, establishing the VALIDITY of BLAKE'S PATENT, and made a DECREE for an INJUNCTION to RESTRAIN the DEFENDANTS, Messrs. THOMAS ARCHER and SON, of Dunston Engine-Works, near Gateshead-on-Tyne, from INFRINGING such PATENT, and ordering them to pay to the Plaintiffs the costs of the Suit.

ALL PERSONS are hereby CAUTIONED against MANUFACTURING, SELLING, or USING any STONE BREAKERS similar to BLAKE'S, which have not been manufactured by the Plaintiffs. Application will forthwith be made to the Court of Chancery for INJUNCTIONS AGAINST ALL PERSONS who may be found INFRINGING BLAKE'S PATENT after this notice.

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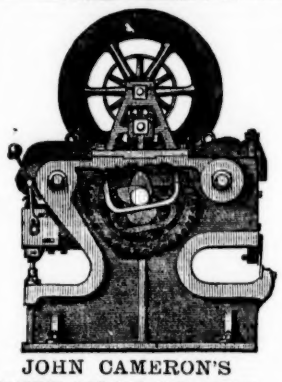

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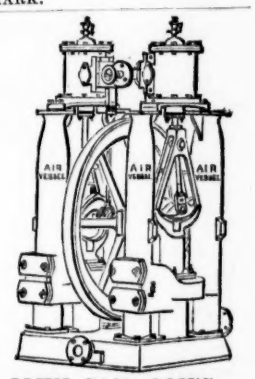

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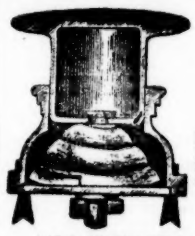

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THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—		10 1 8	0 10 0	July 1868
200	Botallack, t, c, St. Just	91 5 0	—		488 15 0	5 0 0	May 1866
4000	Brookwood, c, Buckfastleigh	1 11 0	—		0 12 6	0 2 6	Aug. 1868
1000	Bronfloyd, l, Cardigan*	12 0 0	—		10 7 0	0 6 0	Oct. 1868
5094	Bwlch Consols, s-l, Cardigan	4 0 0	—		0 5 0	0 5 0	June 1868
6400	Cashwell, l, Cumberland*	2 10 0	—		0 3 0	0 1 6	Aug. 1868
916	Cargoll, s-l, Newlyn	15 5 7	22	20 21	15 5 0	0 10 0	Oct. 1868
1280	Chanticleer, l,	0 7 8	—		0 0 6	0 0 6	Oct. 1868
2450	Cook's Kitchen, c, Illogan‡	19 14 9	13	12 13	1 12 0	0 5 0	Oct. 1868
509	Creegbrawse and Penkevil, t	—	—		2 5 0	1 5 0	April 1868
867	Cwm Erfin, l, Cardiganshire*	7 19 0	—		29 3 0	0 15 0	Oct. 1868
128	Cwmystwith, l, Cardiganshire	60 0 0	—		383 10 0	2 0 0	Aug. 1868
280	Derwent Mines, s-l, Durham	300 0 0	—		177 0 0	2 10 0	July 1868
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	380	370 390	1115 0 0	6 0 0	Sept. 1868
656	Ding Dong, t, Gulval‡	49 14 6	—	17 19	0 10 0	0 10 0	Sept. 1867
358	Dolcoath, c, t, Camborne	128 17 6	—	350 370	857 10 0	5 0 0	Oct. 1868
6144	East Caradon, c, St. Cleer†	2 11 6	4⅞	4¾ 5	14 11 6	0 2 0	July 1867
300	East Darren, l, Cardiganshire	32 0 0	—		160 10 0	2 0 0	July 1868
128	East Pool, t, c, Pool, Illogan	24 5 0	—		442 10 0	7 10 0	Sept. 1868
1906	East Wheal Lovell, t, Wendron	3 9 0	8	8 9	4 1 6	0 10 0	May 1868
2800	Foxdale, l, Isle of Man*	25 0 0	—		72 0 0	0 10 0	Sept. 1868
5000	Frank Mills, l, Christow	3 18 6	3⅞	3¼ 3¾	3 5 6	0 5 0	Feb. 1866
3950	Gawton, c, Tavistock	3 10 6	1⅜		0 3 0	0 3 0	Jan. 1868
15000	Great Laxey, l, Isle of Man*	4 0 0	20½	19½ 20½	9 5 0	0 10 0	Sept. 1868
5908	Great Wheal Vor, t, c, Helston†	40 0 0	14½	13 14	13 11 0	0 7 6	Sept. 1868
1024	Herodsfoot, l, near Liskeard†	8 10 0	44	44 46	48 0 0	1 10 0	Oct. 1868
6000	Hingston Down, c, Calstock†	5 10 6	—		0 10 0	0 5 0	April 1866
165	Levant, c, t, St. Just	10 8 1	—		1095 0 0	2 0 0	July 1868
400	Lisburne, l, Cardiganshire	18 15 0	—		509 0 0	3 0 0	July 1868
3000	Maes-y-Safn, l, Flint*	20 0 0	—		4 0 0	0 5 0	Oct. 1868
9000	Marke Valley, c, Caradon	4 10 6	8⅞	8¼ 8¾	4 14 0	0 5 0	Oct. 1868
3000	Minera Boundary, l, Wrexham*	1 0 0	—		0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co., l, Wrexham*	25 0 0	175		239 13 0	6 0 0	Aug. 1868
20000	Mining Co. of Ireland, c, l, cl	7 0 0	14⅜	14 14¼	—	9 p.ct.	July 1868
40000	Mwyndy Iron Ore*†	3 5 0	—		0 8 6	0 2 0	Mar. 1868
200	Parys Mines, c, Anglesey*	50 0 0	—		162 10 0	2 10 0	Aug. 1868
12800	Prince of Wales, l, Calstock	0 12 6	2¼	2 2⅛	0 7 6	0 1 0	Aug. 1868
1120	Providence, t, Uny Lelant†	10 6 7	29	26 28	85 12 6	0 10 0	Sept. 1868
512	South Caradon, c, St. Cleer†	1 5 0	345		597 10 0	5 0 0	Oct. 1868
6000	South Darren, l, Cardigan*	3 6 6	—		0 13 0	0 1 6	Aug. 1868
937	South Wh. Crofty, c, Illogan	24 10 10	14	12 14	1 0 0	0 10 0	Sept. 1868
496	So. Wh. Frances, c, Illog.†‡	18 18 9	16	15 20	374 13 6	1 0 0	Mar. 1868
508	Summer Hill, l, Mold	3 18 6	—		2 5 6	0 5 0	Feb. 1868
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	16½	16 17	19 16 0	0 5 0	Sept. 1868
2000	Trumpet Cons., t, Helston	11 10 0	—	13 15	13 10 0	0 10 0	Oct. 1868
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	62	61 62	29 7 6	2 0 0	Aug. 1868
5000	West Godolphin, t, c, Breage	0 1 0	—		0 2 0	0 2 0	Dec. 1867
400	W. Wheal Seton, c, Camborne†	47 10 0	185	195 205	610 0 0	5 0 0	Oct. 1868
512	Wheal Basset, c, Illogan†	5 2 6	67½	60 65	632 10 0	1 0 0	June 1868
1024	Wheal Friendship, c, Tavistock	20 0 0	—		300 10 0	0 10 0	Nov. 1866
512	Wheal Jane, s-l, Kea	10 10 0	—	40 43	—	1 0 0	July 1868
4295	Wheal Kitty, t, St. Agnes	5 4 6	3	3¼ 3¾	3 9 0	0 2 0	Aug. 1868
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	18½		66 0 0	0 17 6	Sept. 1868
80	Wheal Owles, t, St. Just‡	70 0 0	—		350 13 0	7 10 0	Feb. 1868
396	Wheal Seton, t, c, Camborne	58 10 0	51	47 50	254 15 0	2 0 0	Feb. 1868
3000	Whitewell Lead, Clitheroe*	0 5 0	—		1 0 0	0 10 0	Dec. 1867
17000	Wicklow, c, t, Wicklow	2 10 0	—	11⅝ 11½ x d	49 1 0	0 5 0	Oct. 1868

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
35000	Alamillos, l, Spain*†	2 0 0	—		0 4 6	0 2 0	Sept. 1868
20000	Australian, c, South Australia†‡	7 7 6	—		0 1 6	0 0 6	Aug. 1868
15000	Cape Copper Mining*†	7 0 0	—		3 2 6	0 10 0	Feb. 1868
30000	Central American Association*†	1 10 0	—		—	—	
76162	Don Pedro North del Rey*†‡	0 14 0	4	3¾ 4	1 0 3	0 3 0	Sept. 1868
70000	English and Australian, c‡	2 10 0	—		—	0 1 0	Feb. 1868
28000	Fortuna, l, Spain*†	2 0 0	2		1 11 10	0 2 6	Sept. 1868
20000	Gen. Mining Assoc., Nova Scotia†	20 0 0	—		23 10 0	0 15 0	June 1867
10000	Gonnesa, l,*	5 0 0	—		10 per cent.		Aug. 1868
68000	Kapunda Mining Co., Austra†‡	1 0 0	—		0 1 10	0 0 6	Nov. 1868
15000	Linares, t, Spain*†	3 0 0	3		11 15 0	0 3 4	Sept. 1868
50000	Panulcillo, c, Chili*†	3 0 0	—		10 per cent.		Yearly.
6000	Peel River Land and Mineral*†	100 0 0	—		—	—	
10000	Pontgibaud, s-l, France†	20 0 0	—		5 6 2	0 11 11	May 1868
100000	Port Phillip, g, Clunes†	1 0 0	1¾	1¾ 2	1 3 0	0 1 0	Oct. 1868
120000	Scottish Australian Min. Co.†	1 0 0	—		8 per cent.		May 1868
11000	St. John del Rey, Brazil*†	15 0 0	18	17½ 18	81 10 0	4 5 0	Dec. 1867
13500	Vancouver Coal Mining*†‡	6 0 0	9½	8¾ 9¼	10 per cent.		Nov. 1868
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 7	0 0 7	July 1868
40000	West Canada Mining Co.*	1 0 0	—		0 19 6	0 2 6	May 1866

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
50000	Anglo-Argentine, s, Argentine Republic*	1 0 0	—		
100000	Anglo-Brazilian, g*†	0 10 0	⅝	½ ⅝	Nov. 1866
12500	Anglo-Italian, g*†	0 10 0	—		Jan. 1868
20000	Australian United, g	1 0 0	—		Mar. 1868
2464	Burra Burra, c, South Australia‡	5 0 0	—		
20000	Capula, s, Mexico*†	1 17 6	2		May 1868
30000	Chontales, g, s, Nicaragua*†	5 0 0	2½	2⅜ 2⅝	Mar. 1868
12000	Cobre Copper Company, c, Cuba†‡*	45 10 0	—		Jan. 1868
10000	Copiapo Mining Company, Chili†‡	16 10 0	—		
10000	Copiapo Smelting, Chili*	10 0 0	—		April 1866
300	Copper Miners' Co. of South Australia* [150 £100 pd., 150 £70 pd.]				Nov. 1866
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—		Nov. 1866
40000	Fortune Copper Mining Co. of Western Australia	2 0 0	—		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 17 6	¾	13s. 15s.	May 1868
10000	Great Barrier Land, Mining, &c., New Zealand	5 0 0	—		Fully pd.
80000	Great Northern, c, South Australia†	1 11 6	—		Sept. 1862
50000	Javali, g, Nicaragua	1 0 0	—		June 1868
7927	Lusitanian (Portugal)†‡	2 15 0	—		Dec. 1866
83640	Mariquita, g, s, New Granada	1 0 0	—		Feb. 1868
12500	Nerbudda Coal and Iron, India*†	6 0 0	—	3¾ 4¼	Dec. 1867
51000	New Quebrada, c, Venezuela*†	4 4 0	—		
15000	Otea, c, New Zealand*	2 0 0	—		Fully pd.
80000	Pestarena United, g, Italy*†	2 17 6	1⅞	1¼ 1½	
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]	—			May 1866
100000	Rossa Grande, g, Brazil*†	0 14 0	1⅜	1¼ 1⅜	June 1867
15000	San Pedro del Monte, s, Mexico*	4 0 0	—		Sept. 1866
10000	San Roque, l, Spain	5 0 0	—		Fully pd.
10000	Sao Vicente, Brazil*†	1 0 0	—		Oct. 1868
100000	Taquaril, g, Brazil*	0 7 6	⅝	⅜ ⅝	Oct. 1868
6000	Terreseu, s-l, Isle of Sardinia	2 0 0	—		
43174	United Mexican, s, Mexico†‡*	28 5 2	2¼	1¾ 2	May 1868
30000	Val Antigoria, g, Italy*	1 2 6	—		
6000	Val Sassam, s, c, l, Italy*†	8 0 0	—		Aug. 1868
45000	Victor Emanuel, c, Italy*	1 0 0	—		Fully pd.
20000	Washoe, g, Nevada†	5 0 0	—		Fully pd.
80000	Worthing, c, South Australia*†	1 0 0	½		Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	—		Fully pd.
45000	Yudanamutana, c, South Australia*†‡	3 0 0	2¼	2⅛ 2⅜	Fully pd.

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
12000	Brynpostig, Montgomery, l*	1 0 0	3		
1000	Carn Brea, c, t, Illogan‡	30 0 0	20	18 20	June 1868
3000	Chiverton, l, Perranzabuloe	10 15 0	3⅞	4 4¼	Aug. 1868
3000	Chiverton Moor, l, Perranzabuloe	6 8 6	6⅞	6⅜ 6⅝	Aug. 1867
2880	Clifford Amalgamated, c, Gwennap‡	40 17 6	—		Oct. 1868
12800	Drake Walls, t, Calstock‡	2 5 0	1	¾ ⅞	Dec. 1866
512	East Basset, c, Redruth†‡	35 15 0	—	8 8½	July 1868
6000	East Carn Brea, c, Redruth‡	4 0 0	⅜	7s. 8s.	June 1868
6000	East Grenville, c, Camborne	4 0 6	4⅜	4⅜ 4⅝	Aug. 1868
4000	East Wheal Russell, c, Tavistock†	13 13 6	—		Oct. 1868
6144	Gonamena, c, St. Cleer	7 11 3	—		Oct. 1868
5000	Great North Downs, c, Redruth	6 13 0	2	1½ 2	Feb. 1867
4800	Great Retallack, s-l, b, Perranzabuloe	2 19 6	3⅛	2¾ 3	Oct. 1868
5143	Great South Tolgus, c, Redruth	1 8 0	—		April 1868
1798	Great Wheal Fortune, t, Breage	31 7 4	—		Mar. 1868
400	New Wheal Seton, c, Camborne	60 10 0	—		April 1868
3457	North Downs, c, Redruth	5 8 10	—		Jan. 1868
695	North Roskear, c, Camborne	60 9 0	12	11 12	Sept. 1868
5936	North Treskerby, c, St. Agnes	1 9 0	⅝	9s. 11s.	Dec. 1860
3000	North Wheal Chiverton, l, Perranzabuloe	4 0 0	—		Mar. 1867
1024	Rose and Chiverton United, l, Newlyn	6 0 0	—		Aug. 1868
6138	South Condurrow, t, c, Camborne	4 8 6	¾	14s. 16s.	Oct. 1868
940	St. Ives Consols, t, St. Ives‡	10 15 0	7	7 8	Nov. 1867
920	Stray Park, c, t, Camborne†‡	45 5 8	1¾	4 5	April 1868
548	Trelyon Consols, t, St. Ives	16 0 0	—		Dec. 1866
6000	West Basset, c, Illogan†‡	2 0 0	⅞		May 1868
1024	West Caradon, c, St. Cleer†‡	23 0 0	3½	2⅛ 3	July 1868
12800	West Drake Walls, c, Calstock	0 6 0	10s.	7s. 9s.	Nov. 1868
2582	West Great Work, t, Breage	5 11 0	—	2¼ 2½	June 1866
6000	West St. Ives, t, c, St. Ives	0 3 6	9s.		Oct. 1868
512	West Wheal Frances, t, Illogan	106 15 0	36	35 37½	
5000	West Wheal Kitty, t, St. Agnes	3 2 0	4	3½ 4	April 1868
6000	Wheal Agar, c, Illogan	7 13 0	—	1 1⅛	Oct. 1868
512	Wheal Buller, c, Redruth†‡	27 0 0	7	4 5	Aug. 1868
811	Wheal Emily Henrietta, c, Illogan	20 0 0	30	26 27	Jan. 1868
5724	Wheal Grenville, c, Camborne†	10 8 0	1¾		Sept. 1868
1040	Wheal Trelawny, s-l, Liskeard†	8 17 0	9		Sept. 1868
5000	Wheal Uny, t, c, Redruth.	10 14 6	3¾	3¼ 3¾	Oct. 1867

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
4000	Ballacorkish, I. of Man, l, c*	4 0 0	—	
4000	Bedford Consols, c, Tavistock	3 0 6	⅝	½ ⅝
4000	Bedford United, c, Tavist.*	2 13 8	2	2 2¼
1248	Boscaswell, t, c, St. Just	7 6 0	—	
5000	Bottle Hill, t, Plympton	1 14 6	—	
5000	Bryn Gwiog, l, Flint	0 18 0	—	
1200	Bryn Gwyn, l, Mold*‡	9 0 0	—	
7500	Brynystwith, l*	0 10 0	—	
1000	Budnick Consols, c	2 5 0	—	
6000	Bwadrain Cons., s-l, Cardig.	3 2 0	—	
30000	Caldbeck Fells, l, Cumberld.*	1 15 0	11s.	10s. 11s.
1000	Camborne Consols, c	18 10 0	—	
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 25s. pd.]			
5000	Capel Banhaglog, l, Mont.	1 10 0	—	
914	Caradon Consols, c, St. Cleer	32 13 6	—	
1000	Cardynham China-clay*	3 0 0	—	
6000	Carn Camborne, c, Cambrn.	2 9 0	—	⅝ ⅜
2000	Carnmarth Granite Co.*	—	—	
20000	Carysfort [3200 £2½ pd., 16800 £1 ½ pd.]			
2500	Central Minera, l, Wrexham*	3 1 6	—	
16000	Central Snailbeach, l*	1 0 0	—	
3000	Chiverton Valley, l, Perranz.	2 0 0	—	
2048	Colquite & Callington Un., c	1 3 0	—	
256	Condurrow, c, t, Camborne‡	76 10 0	—	
50000	Connorree, c, s-l, Wicklow*	1 0	—	
983	Copper Hill, c, Redruth‡	12 10 0	—	
1000	Cornwall Hematite Co.*	5 0 0	7¼	7 7¼
1055	Craddock Moor, c, St. Cleer‡	13 15 0	—	
12000	Crelake, c, Tavistock	3 12 0	—	
6000	Cuddra, t, St. Austell	5 10 0	—	
740	Eaglebrook, l, Talybont*	19 15 0	—	
1000	East Basset and Grylls, t	3 5 0	—	
6000	East Bottle Hill, t	0 12 0	—	
4000	East Chiverton, l, Perranz.	3 0 9	1½	1¼ 1½
4000	E. Gunnislake & S. Bed. c	10 19 0	—	
6000	East Laxey, l, Isle of Man	3 0 0	—	
5000	E. Rosewarne, c, t, Gwinear	2 19 0	—	
6000	East Snaefell, l, I. of Man*	3 0 0	—	
5610	East Seton, c, Camborne	0 16 6	⅞	
1190	E. Wh. Agar, c, St. Cleer	12 17 0	—	
6000	East Wheal Reeth, Lelant	—	1⅛	⅞ 1⅛
5000	E. Wh. Rose Con., l, Per.*	2 10 0	—	
6000	Ebury Lead Min. Co., Flint*	1 15 0	—	
6000	Fortescue Cons., c, Tavistock	0 12 6	—	
940	Fowey Con., c, Tywardreath‡	5 4 6	—	
1026	Garden, c, Morvah	6 15 3	—	
6000	Gen. Min. Co. for Ireland, c	5 10 0	—	1½
10000	Glan Alun, l, Mold	0 12 0	—	12s. 13s.
40000	Glasgow Caradon c* [30000 £1 pd., 10000 15s. pd.]			
5700	Goginan, Cardigan, l	12 10 0	—	
6000	Gothic, s-l, Cardigan*	2 10 0	—	
486	Grambler & St. Aubyn, c†‡	74 0 0	—	
10000	Great Cwmsymlog, s-l*	1 15 0	—	
4096	Great Caradon, c, St. Ive	4 1 0	—	
5000	Great Mona, l, Isle of Man*	4 0 0	—	
12500	Gt. No. Laxey (Isle of Man)*	1 0 0	—	
6000	Great North Tolgus	1 0 0	—	
1000	Great N. Tolgus, c, Illogan	10 0 0	—	
15000	Great Rhosesmor, l	5 0 0	—	
6000	Gt. S. Chiverton, s-l, Perranz	1 18 6	—	1¼ 1¾
3313	Gt. Wh. Baddern, t, Devoran	7 17 6	—	
119	Great Work, t, Germoe	100 0 0	—	
10240	Gunnislake (Clitters'), t, c	4 19 0	—	
6068	Gwydyr Park, l, Llanrwst	1 11 0	—	
6400	Harwood, l, Durham*	0 7 6	—	
2500	Laxey Neath Smelting Co.*	3 10 0	—	
1019	Leeds and St. Aubyn, t, c	19 13 4	—	
5120	Lovell Consols, Wendron, t	0 6 0	—	
6000	Maudlin, c, Lostwithiel	4 7 0	—	
6000	Mid-Wales, s-l,*	2 10 0	—	
4662	Minera U., l* [2500 £4 p., 2162 £2 p.]		—	
1000	Montgomeryshire, l, b*	3 0 0	—	
640	Mount Pleasant, l, Mold	4 0 0	—	
1024	Nangiles, t, c, Kea	30 12 0	—	
12800	Nether Hearth* [6400 £1 pd., 6400 2s. pd.]			
6000	New Birch Tor & Vitifer, t‡	1 13 6	—	
1500	New Chiverton, l, Perranz.	0 17 0	—	
6000	New Clifford, c, Gwennap*	2 15 0	—	
24000	New Cornish [12000 £1 pd., 12000 15s. pd.]			
6400	N. Crow Hill, l, St. Stephen	3 6 6	—	
6514	New E. Russell, c, Tavistock	0 12 6	—	
20000	New Gt. Cons., c, Tavistock*	0 17 6	—	
3000	New Huntingdon, t, Devon	0 1 0	—	
6400	New Pembroke, St. Blaz. t, c	1 12 0	—	
3680	New Treleigh, c, Redruth	—	—	
667	New Trevenen, t, Wendron	12 1 6	—	
6000	New Westminster, l	5 10 0	—	
4096	New Wh. Lovell, t, Wendron	1 19 6	—	⅞ 1
2000	N. Wh. Towan, c, t, Wendron	1 10 0	—	
5000	No. Dolcoath, c, Camborne	4 3 0	—	
1361	No. Grambler, c, Redruth	9 3 9	—	
6000	North Jane, t, s-l, Kenwyn	3 3 0	—	
2000	North Levant, t, c, St. Just	10 12 0	11	10 11
4000	No. Phœnix, c, Linkinhorne	4 11 0	—	
3240	North Pool, c, Illogan	6 3 6	—	
1024	No. Retallack, c, Perrazabuloe	2 0 0	—	
1935	No. Shepherds, l, Newlyn*	6 10 0	—	
6000	North Wheal Basset, c, t†	5 0 0	—	
5610	N. Wh. Crofty, c, Illogan†	3 11 3	1½	1 1½
6144	N. W. Robert, c, Smp. Spiney	4 8 11	—	
12288	Okel Tor, c, Calstock	2 7 4	—	
8000	Old Gunnislake, c, Calstock	3 9 6	—	
6400	Par Consols, c, St. Blazey†‡	2 14 6	—	
8465	Pedn-an-drea, t, Redruth	6 8 6	—	
5000	Pendeen Consols, c, St. Just	7 5 0	—	
4000	Penhale United, s-l, Perran.*	2 15 0	—	
2177	Penhale Wh. Vor, t, c, Breage	6 2 6	—	
5000	Penhalls, t, St. Agnes	3 0 0	—	
1772	Polberro, t, St. Agnes	15 0 0	—	
6000	Prosper U., t, c, St. Hilary	9 4 0	—	
12000	Redmoor, c, t, Callington	1 18 6	4s.	3s. 5s.
6000	Reinnie Laxey, l, I. of Man*	4 10 0	—	
3000	Rhydtalog, s-l, Cardigan	0 5 0	—	
6000	Roaring Water, c*	2 15 0	—	
2000	Rosecliff and Tolcarne, l*	9 15 0	—	
5915	Rosewall Hill & Ransom, c	3 5 0	—	
10000	Royalton, t, St. Columb	1 1 0	1⅝	1½ 1⅝
20500	Snaefell, l, Isle of Man*	1 0 0	—	
12000	Sortridge Cons., c, Tavistk.†	2 5 6	—	
512	South Basset, c, Gwennap	30 10 0	—	
3000	So. Chiverton, s, l, Perranz.	6 2 6	—	
6000	S. Dolcoath & Carnarth. Con.	2 16 6	—	
3000	So. Fowey, c, Tywardreath	0 15 0	—	
3395	So. Herodsfoot, l, Liskeard	4 10 0	—	
30210	South of Scotland, c*l	1 0 0	—	
2739	South Trevenna, c,	2 10 0	—	
6000	South Wheal Grenville, t, c	1 5 6	—	
400	So. Wh. Seton, c, Camborne	83 13 0	—	
236	Spearne Consols, t, St. Just	4 4 4	—	
242	Spearne Moor, t, St. Just	6 2 0	—	
673	St. Ives Wh. Allen, t, St. Ives	18 18 7	—	
8771	St. Just Amalg., t,* [6000 £3 10s. pd., 2771 £2 5s. pd.]			
300	Steeple Aston Iron Ore Co.	7 0 0	—	
7000	Stiperstones, l, Salop*	5 10 0	—	
6000	Tamar Valley, s-l, Beeralston	0 10 0	—	
3500	Tin Hill, t, St. Austell	1 12 6	—	
501	Tresavean and Tretnurrup	16 11 0	—	
4096	Trewetha, s-l, Menheniot	10 19 6	—	
1943	Treworlis, t, Wendron	11 15 4	—	
4200	Vigra and Clogau, c, Dolg.*‡	5 10 0	—	
2500	West Briton, Crowan	1 2 6	—	
256	West Damsel, c, Gwennap	38 10 0	—	
1000	West Devon Cons., c, Tavistck.	—	—	
12000	W. Maria & Fortes., c, Lam.	3 13 0	—	
12800	West Prince of Wales, c	0 11 0	—	
1000	West Rose Down, c, Linking.	22 0 0	—	
512	West Tolgus, c, Redruth	62 0 0	—	
4096	W. Wh. Tremayne, St. Erth	0 12 0	—	
741	Wheal Basset and Grylls, t	7 18 6	—	
6000	Wheal Crebor, c, Tavistock	2 7 6	½	8s. 10s.
4000	Wh. Emma, c, Buckfastleigh	3 19 0	—	
6000	Wheal Ida, s-l, St. Ive	1 6 6	—	
1024	Wh. Kitty, t, Uny Lelant†	3 10 6	—	5 6
896	Wh. Margaret, t, Uny Le.‡	13 17 6	7	6 7
728	Wheal Margery, St. Ives, t, c	27 4 0	—	
6000	Wheal Mary Florence, c*	2 6 0	—	
1000	Wh. Mary Hutchins, c, Plymp.	2 0 6	—	
2000	Wheal Rose, c, Scorrier	0 10 0	—	
6000	Wheal St. Vincent, s	0 1 0	—	
1920	Wh. Trannack, c, Sithney	1 13 3	—	
1200	Wheal Trevenna, t, c*	10 0 0	—	

MISCELLANEOUS.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
60000	Anglo-American Telegrh.*†	10 0 0	22	21½ 22
10000	Arklow Chemical Works, l	1 0 0	—	
Stock	Atlantic Telegraph	100 0 0	33	30 32
Stock	Ditto, 8 per cent.	100 0 0	80	77 79
80000	Ebbw Vale Iron Co.*†	27 10 0	11¾	12 14
148525	London Gen. Omnibus*†	4 0 0	2	1⅞ 2⅛

b, blende; cl coal; c, copper; g, gold; l, lead; s, silver; sl, slate; sl, silver-lead; t, tin; z, zinc.

*** Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those marked thus ‡ have paid Dividends.

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